**Communicating Imminent Safety Threats: Understanding the Use of Emergency Alerting by Canadian Law Enforcement**

By

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Canadian Law Enforcement

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# Abstract

Mandatory emergency alerts distributed via Canada's National Public Alerting System (NPAS) notify of imminent safety situations and are used by police to support public safety. This mixed-methods study investigated how Canadian police navigate challenges, utilize tools and meet public expectations when communicating via emergency alert and what forms public awareness, trust and expectations regarding police communication methods during imminent safety situations. Eight interviews with Canadian police service representatives were conducted, and public survey data were collected ($n = 486$). Interview results indicated that police preparedness and experience affect alerting approach, alert strategy and risk impacts police decision making, alerting is influenced by external factors and alerting approach differs across police services. Survey results linked public trust in the police to communicate when an urgent threat impacts their safety and whether local police do a good job educating the public about alerts. Targeted, police-driven alerting education campaigns are recommended to expand public understanding and build trust and preparedness.

*Keywords: Emergency public alert, police trust, crisis communication, Canadian police, emergency preparedness*

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## List of Abbreviations Used

CACP            Canadian Association of Chiefs of Police

CIC             Critical Incident Commander

CRTC            Canadian Radio-television and Telecommunications Commission

EMO             Emergency Management Officials

FPT             Federal-Provincial-Territorial

KPAS            Korean Public Alert Service

NPAS            National Public Alerting System

NAAD            National Alert Aggregation and Dissemination System

PADM            Protective Action Decision Model

RFI             Request for Information

RCMP            Royal Canadian Mounted Police

RTOC            Real-time Operations Centre

SOREM           Senior Officials Responsible for Emergency Management

# Introduction

## Background and Study Purpose

Have you ever wondered who or what is behind the emergency alerts you receive on your cell phone or television, warning you about imminent safety threats? This vital emergency communication, sent directly from an official source of information and received by the general public, could help save lives, such as during an active shooter investigation. But how do Canadian police use emergency alerting as a communication tool? Is there a consensus or common practice for emergency alerting among police? The purpose of this study was to explore and understand how law enforcement uses public alerting systems within Canada, often referred to as police-initiated public alerts. It also examined the public's expectations for police to warn of imminent safety threats, informing key police policy and decision-making personnel and contributing to public safety. My extensive experience as an emergency alert issuer for the Saskatchewan RCMP, outlined in the Role of the Researcher section, was a driving factor behind this subject's academic pursuit.

While there are natural occurrences or weather-related studies on emergency alerting, a critical gap exists in scholarship on police use of emergency alerting internationally. Lynn's (2020, 2023) research focuses on AMBER Alerts. In addition to Gow (2007) and Inglis (2021), it sheds much-needed insight into Canada's National Public Alerting System in particular. Inglis (2021) examines information distribution via Canada's NPAS, from the perspective of anonymous emergency managers, and a previous research paper I authored investigated the current state of Canada's NPAS (2023). Gow's (2007) exploration of the renewal of the country's emergency broadcast system is the limited pre-existing research available specifically discussing Canada's NPAS. However, there is little inquiry to inform police personnel during

imminent safety threat situations specifically. The importance of geographic inquiry is noted by Inglis (2021), who says, "…in order to aptly describe and understand the Canadian approach, highly focused research into those areas specific to Canada is warranted (i.e. the technology of AlertReady…etc.)" (p. 76).  Further academic examination of Canadian law enforcement's use of emergency alerting, particularly in time-sensitive active threat situations, is needed.

Police use of emergency alerting has received intense scrutiny within Canada in recent years following the Portapique, Nova Scotia mass casualty (2020), James Smith Cree Nation and Weldon, Saskatchewan mass casualty (2022), in addition to a significant number of AMBER Alert and dangerous person police investigations throughout Canada. Public expectation of law enforcement to warn of imminent safety threats, especially to potentially save lives, is significant. Still, public trust in the police and public response to communication about threats may impact whether alert messages are adhered to. Increasing the relevance and timeliness of this research is an emergency alerting change driven by mass casualty inquiry and coroners' inquest public alerting recommendations and a fast-approaching Canadian Radio-television and Telecommunications Commission-driven broadcast license renewal deadline (August 31, 2026), which may impact whether Pelmorex continues to maintain and provide a public alerting service in Canada.

Public alerting should be of interest to all Canadians, especially given the concerning Violent Crime Severity Index data (Statistics Canada, 2024). In short, it is not a matter of *if* the next imminent safety threat occurs requiring police response – it is *when*. Despite several recent tragedies in Canada, gaps exist in understanding how police consider or use emergency alerting and whether the public has any knowledge of, or any expectations exist, of police communication via emergency alerts. Given the limited international investigation, I had great

interest and enthusiasm in focusing my research on Canadian police – so it may inform decision makers, including myself, to help strengthen current protocols and training, encourage National Public Alerting tool advancements and educate on police considerations in urgent public safety circumstances.

**Research Questions**

This study explores the effectiveness and challenges of police communication during imminent safety threat situations in Canada, with an aim to inform policy and decision-making to help enhance public safety. Using a mixed-methods approach, the research combines qualitative findings from interviews with police personnel and quantitative survey results from the public.

The interviews investigate how Canadian police manage challenges, utilize tools and meet public expectations when communicating during imminent safety threats, specifically regarding emergency alerting. The quantitative survey examines factors influencing public awareness, trust and expectations regarding police communication methods during urgent threat situations. The intention is to have these methods provide a comprehensive understanding of both institutional practices and public perceptions related to police communication via emergency alerts in Canada, with any connections or recurrent themes highlighted accordingly. The research questions that guided this study are:

1. RQ1: How do police services in Canada navigate challenges, utilize tools, and meet public expectations when communicating via emergency alert(s) during imminent safety threats?

2. RQ2: What forms public awareness, trust, and expectations regarding police communication methods during urgent threat situations in Canada?

**Chapter One: Literature Review**

**Emergency Communication in Canada**

Emergency preparedness is critical to the safety and security of any country, with communication playing a key role. Once the earliest forms of mass public notification – physical air raid warning sirens affixed to buildings attributed to 1940s nuclear war threat preparedness (Powell, 2018) – were removed throughout Canada in the early 1990s, a gap existed in public notification and emergency readiness. The Canadian Radio-Television and Telecommunications Commission (CRTC) is responsible for regulating and supervising broadcasting and telecommunications in Canada. In 2000, the CRTC received an application from a private company called Pelmorex Media Inc., the owner of the Weather Network/MétéoMédia, to amend their broadcasting license to transmit warning messaging to the public. It noted that, if approved, the service "…would broadcast timely local warnings of imminent threats to life or property caused by severe weather disturbances, natural disasters or other emergencies, on behalf of authorised government agencies such as Environment Canada" (CRTC, 2000, para. 1).

Pelmorex's initial application was denied, and in 2005, the CRTC issued a public notice to establish emergency alerting services in Canada. While reviewing submissions in response to this notice, the CRTC announced an intent to develop emergency alerting and telephone-based community notification services. The move would allow "…public authorities to use 911 databases in order to improve the effectiveness of telephony-based emergency public alerts" (CRTC, 2007).  This announcement considered the totality of what an emergency alert should be capable of, including the ability to target alerts and permit designated authorities to respond to the threat of local, regional and national emergencies. Further, the Commission believed the system "could significantly improve public safety" (CRTC, 2007). The continued collaboration

between Federal-Provincial-Territorial (FPT) governments and industry partners resulted in the creation of Canada's National Public Alerting System (NPAS).

Ultimately, the successful applicant in the establishment of emergency alerting services was Pelmorex, and the company remains the sole entity for wholly assuming all costs associated with the development and operation of the National Alert Aggregation and Dissemination (NAAD) System, the technical infrastructure that distributes emergency communications to the public in Canada. With the exception of a monthly collected wholesale rate per Weather Network/MétéoMédia subscriber, Pelmorex continues to fund and is solely responsible for all aspects of maintaining and updating the NAAD system (CRTC, 2000).

The NAAD system launched in 2010, and in 2014, following low uptake by Last Mile Distributors, including Canadian broadcasters, cable and satellite companies, the CRTC mandated the issuance of "broadcast immediate" emergency notifications to the general public via their channels (Public Safety Canada, 2020). In 2017, wireless emergency alerts were launched publicly and in 2018, wireless service providers were mandated to distribute broadcast immediate public alerts via their channels (CRTC, 2017).

The NPAS was rebranded nationally as Alert Ready and further rebranded by some provincial emergency management organizations (EMO's), such as SaskAlert in Saskatchewan, Alberta Emergency Alert and BC Emergency Alert, to name a few. Today, a patchwork quilt or siloed approach to public alerting and use of the NPAS exists across Canada, with some provincial EMO's maintaining sole use of the NAAD system trusted feed to distribute emergency alerts directly to the public, while others delegate use to relevant authorities, such as police and even municipal government. Current access to the NAAD trusted or independent data feed is limited to Canada's provincial and territorial EMO's, Environment and Climate Change

Canada and the Ontario Provincial Police (Public Safety Canada, 2022, p. 35; Pelmorex Communications Inc., 2019).

Pelmorex's broadcasting license term and mandatory distribution orders, linked to the amendment approved in 2007 to provide emergency alerting services, expired in 2023 and 2024. Emails exchanged between the CRTC and Public Safety Canada employees in March 2022, received as the result of a Public Safety Canada Access to Information Act request, identify there was "limited appetite" for a public hearing for renewals, including the Pelmorex license, given "legislation projects in parliament" at the time and a potential administrative renewal or extension being considered (p. 26). Additionally disclosed in a 2022 draft presentation to FPT EMO's, it was written that the sustainability of the current funding model of the NPAS, set to expire on August 31, 2023, "…may not be the most appropriate vehicle for the continued support of the NAAD system…" and "The current funding model could be extended temporarily via administrative renewals" (p. 60). The CRTC administratively renewed the broadcasting license until August 31, 2026 that, "[Would] allow sufficient time for the Commission to modernize its regulatory frameworks in response to the new Broadcasting Act and implement the appropriate changes in the future" (CRTC, 2023).

In 2008, Public Safety Canada advised they would release a request for proposal for the creation of an aggregation and distribution centre for a national emergency alert system. One year later, Pelmorex shared that no budget was available at either the federal or provincial level in Ontario and Quebec specific to emergency alerting. Over 15 years later, a Notice of Proposed Procurement was issued publicly in August 2024 on behalf of Public Safety Canada for an exploratory Request for Information (RFI) for the NAAD. The RFI's intention was to solicit feedback and aimed to "…better understand the public alerting market to understand potential

future ways forward" (Public Safety Canada, 2024, p. 7). An RFI, obtained via an Access to Information Act Request, included questions around continuity of service, security assurances, ongoing system improvement capabilities, and details around a submission's current ability to alert populations with limited connectivity and future potential for their organization to provide an "alerting system" service to serve Canada, among others (Public Safety Canada, 2024). During the open RFI process, an inquiry was made regarding funding for the project, to which Public Safety Canada responded, "This RFI is exploratory in nature and is intended to inform forward-looking discussions and potential options to sustain a national public alerting capability. This includes understanding industry considerations around potential implementation timelines and requirements. As this work is exploratory, details on project funding are not available at this time" (2024, p. 1). The RFI specifically advised that there was no association with the potential procurement of any goods or services following the process.

The NPAS is at a critical juncture as to whether it will continue to be seen as a reliable, trustworthy and useful tool to warn the public of imminent safety threats. In a redacted email disclosed as part of a Public Safety Canada Access to Information Act Request, the soon-departing manager of alert, broadcasting and broadband engineering with the CRTC warned:

> [The NPAS] has now graduated from a new to an established capability in the Canadian landscape that the public has now grown to rely upon to be informed of life threatening situations in a timely manner. Some of the deficiencies and capability gaps that were acceptable in the early stages of the capability now need to be addressed. Several countries in the process of establishing their own capability have sought to use our system as an example and are building on our lessons learned in trying to establish their own. This includes the UK, Korea and Australia. (CRTC, 2022, p. 16)

Annual tests of the National Public Alerting System occur twice per year – once during Emergency Preparedness Week each May and in November (Pelmorex, 2024). The threat of natural disasters such as floods, hurricanes and forest fires to mass casualty events and pandemics remains very real in Canada with all these events occurring within the past five years (Chilcotin and Fraser, British Columbia Rivers in 2024, Hurricane Fiona in 2022, Jasper, Alberta wildfire in 2024, James Smith Cree Nation and Weldon, Saskatchewan mass casualty in 2022 and the Covid-19 pandemic beginning in 2020, respectively). However, it wasn't until a mass casualty occurred in Portapique, Nova Scotia in 2020 which resulted in the murder of 22 people including a Royal Canadian Mounted Police officer, that police use of emergency alerts was critically analyzed in the public and media realm.

**Platform Usability and Emergency Alert Defined**

A CRTC Telecom Regulatory Policy (2017) on the implementation of the National Public Alerting System outlines that wireless public alerting "…will warn Canadians about dangers to life and property in a timely manner so that they can take appropriate action," (par. 1). The NAAD system's authorized user agreement definition of emergency public alert focuses on environmental occurrences: "In respect of an imminent or unexpected threat to life caused by severe weather disturbances, natural disasters or other emergencies that meets the criteria for immediate distribution in the standards" (List of Event Codes for Emergency Public Alert Broadcast Immediate Events, p. 2). The FPT Senior Officials Responsible for Emergency Management  created a broadcast immediate events list, guided by the principles of risk management, which continues to guide the event codes for instances when an intrusive alert can be distributed to the public via broadcast (radio/television) and/or wireless device. "Experienced emergency managers" deemed the 33 selected broadcast immediate events to be "high

consequence and low probability" (Broadcast Immediate Events, Version 2.1, 2022, p. 4), and the list was last amended in 2022 with the single addition of Silver Alert.

Sellnow and Seeger (2021) highlighted distinctions between an alert and a warning noting, "An alert is issued when there is an issue of general concern or when something has happened, or may happen, that could jeopardize public security, health and well-being. A warning typically follows an alert when the threat has been confirmed…" (p. 36). Use of an emergency alert distributed via the NAAD system merges alerts and warnings and must include values for an event that are specific to an immediate urgency, extreme severity and certainty that is likely or observed. If these values are not met, a broadcast immediate alert cannot be distributed to the public.

It is vital to note the mandatory nature of urgent threat to life emergency alert messages – known as broadcast immediate alerts, meaning the public must independently modify their receiving wireless device settings to limit or exclude themselves from receipt of these messages distributed via the NAAD system. This means that if a member of the public has the ability to deactivate emergency alerting user settings on their device, they will not receive broadcast immediate emergency alerts distributed by approved last-mile distributors, such as wireless companies, within a geo-targeted area.

This is a key differentiation between subscription-based and for-profit alerting tools available in the general market, which requires the public to proactively sign up to receive information distributed via their purchased platform. A 2022 presentation by FPT Emergency Management obtained via Access to Information Act request, stated: "NPAS is not a single alerting system, but a collection of many individually governed FPT systems and a multitude of interconnected and privately owned systems and alerting programs accessing the technical

infrastructure (NAAD system) privately owned by Pelmorex" (Public Safety Canada, p. 64). The term "emergency alert" can be considered nearly commonplace with the advent and widespread use of for-profit, subscription-based mass and emergency notification systems available in Canada – Everbridge, PEASI, Capterra, Rave, Voyent, TOA and Alertable, to name a few. In the absence of a single, all-encompassing authoritative alerting tool (Davis et al., 2022), Canada risks losing cohesiveness in overall response to imminent threats to life. However, broadcast immediate emergency alerts are distributed immediately within Canada via the National Public Alerting System (NPAS) and are intended for distribution to the public when an imminent threat or danger exists (CRTC, 2023).

According to Alert Ready (2025), 3,879 broadcast immediate emergency alert messages have been distributed within Canada since 2019, including data current to July 31, 2025. All broadcast immediate alert messages have the same associated alert tone, making differentiation nearly impossible without hearing or reading the related distributed messaging. There are currently only three broadcast immediate emergency alerting event types within the NAAD system relevant to law enforcement nationwide:

1. Civil emergency, defined as "Human activities resulting in the disruption of services or requiring varying levels of support, law enforcement or attention" (Broadcast Immediate Events, Version 2.1, 2022, p. 4);

2. AMBER Alerts;

3. Terrorism (Alert Ready, 2024).

A Quebec-based Silver Alert pilot project focusing on missing persons with dementia or cognitive challenges ended June 21, 2024, and the analysis is not yet publicly available (Quebec Alert Ready, 2024).

As of July 31, 2025, a total of 265 civil emergency alerts have been distributed to the public in Canada since 2019 (Alert Ready, 2025). Numbers indicated zero civil emergency alerts were distributed to the public in 2019, 29 in 2020, 39 in 2021, 70 in 2022, 47 in 2023, 42 in 2024 and 38 current to July 31, 2025. Circumstantial information was not readily available to analyze, meaning civil emergency events have been distributed for a wide variety of situations, ranging from Covid-19 public health measure warnings to dangerous people where an imminent threat to the public exists. The Government of Saskatchewan (2023), coroner's inquest recommendations in response to a 2022 Saskatchewan mass casualty stabbing incident cited the need for a specific "dangerous person alert" event type for use by Canadian law enforcement. A 2019 survey by The University of Queensland showed that nearly double the Canadian respondents perceived that emergency alerts distributed via the NPAS should be mandatory for various emergency events. Respondents felt terrorist events were the most important circumstance to distribute an alert, and civil emergencies ranked as the least important (Lynn, 2020, p. 16).

Emergency alerting research has largely focused on public receipt of emergency alerts, oftentimes associated with weather disaster risk reduction such as hydro-meteorological hazards (Harrison et al., 2021). The effectiveness of subscription-based alerting tools is also analyzed, particularly in campus college settings within the United States (Madden, 2015; Sheldon, 2018; Wenjing & Newhagen, 2010, 2012). As Sellnow and Seeger (2021) summarize in their analysis of crisis communication:

> Alerts and warnings are critical to the management of risks and, in many cases, are the only tools available to significantly limit and mitigate harm to the public. Warnings are specialized communication…the evolving nature of media, technology and the public –

including its experience and understanding of risk – suggest more work is needed to capture the complex and dynamic nature of warning systems. (p. 62)

Recent developments, including the advent of Bill C-18 and the Online News Act, have resulted in news agencies being blocked and, therefore, absent from social media platforms in Canada (Meta, 2023). This absenteeism creates a gap in the availability of accurate, reliable information during emergency situations on popular platforms. Given the potential virality of social media posts and related effectiveness (Freberg, 2012), the use of emergency alerting platforms is necessary as an additional tool to communicate about disaster situations and inform the public.

Colbran (2018) questioned whether the police and traditional media can ever successfully bypass each other and provided examples in the delivery of risk-related information to the public via social media (p. 301). While unique from social platforms, there is a continued need for interoperability between police services which deliver crisis information directly to the public through broadcast immediate emergency alerts and news agency responses to alert details. However, emergency alerting can effectively side-step legacy news media, delivering imminent safety threat information directly to the public. In the context of public safety, the mandatory nature of broadcast immediate messaging is necessary given the plethora of factors impacting an alert – for example, the time of day when an emergency alert is distributed to the public may coincide with the middle of the night when no reporters are working, potentially delaying the delivery of life-saving information. Nevertheless, in the context of public trust, particularly in police, as noted further on, legacy news media may be the trusted source of information to amplify and build upon emergency alert messaging. In fact, stated in a 2014 Broadcasting Regulatory Policy and Order requiring the mandatory distribution of emergency alert messages,

the CRTC expressed that "…broadcasters and [Broadcasting Distribution Regulations] have a duty to inform the public of imminent perils."

The wide variety and number of subscription-based, for-profit alerting tools available has saturated the public alerting realm and amplified the already complex nature of vital emergency alerting communication tools (Bean & Grevstad, 2022). The limitations in comprehensive public notification are noted by Davis et al. (2022), who identify the risk to emergency services when using tools that have the inability to communicate with everyone, beyond the scope of a subscription-based tool. These complex considerations are heightened by the increasing demand for inclusivity in all communication types, including public alerting (Wentz et al., 2014). However, it is noted that this subject matter requires further research on a larger scale and in the context of crises.

**Human Implications and Public Response: Protective Action Decision Model**

Using emergency alerting tools to warn the public should be considered an essential tool for communicators, given the direct message delivery during imminent safety threat situations. Equally important is the public's response to these alerts. Lindell and Perry (2004) analyze the process by which humans make decisions during a crisis and their respective protective actions, culminating in the creation of the Protective Action Decision Model (PADM). Disaster response depends on the respective actions taken by the public. The PADM outlines how communication channels, including warning messages, impact public decision making, resulting in a variety of potential responses. Sellnow and Seeger (2021) discuss how the PADM is grounded in persuasion and behavioural decision theory, impacting an individual's relationship between communication and influence, and also one's cognitive process. Lindell and Perry (2012) examine how individual perceptions related to environmental threat, protective actions and

stakeholders "…provide the basis for protective action decision making, the outcome of which combines with situational facilitators and impediments to produce a behavioural response" (p. 617).

In the absence of sufficient information to act on a warning message, individuals may seek additional information - often influenced by personal judgment - to help close any knowledge gaps that exist to support their decision making. Notably, there is a correlation between the PADM and the Canadian NPAS's Common Alerting Protocol Standard, developed by the FPT Public Alerting Working Group of Senior Officials Responsible for Emergency Management. In considering audience perception, "People commonly need additional information about the certainty, severity and immediacy of the threat and the logistical support for protective action…" (Lindell & Perry, 2012, p. 623) Mandatory broadcast immediate alert warning messages must jointly meet specific criteria or values related to event, urgency, severity and certainty (Public Safety Canada, 2024).

There are eight stages and activities with outcomes outlined by Lindell and Perry (2012) as part of the PADM, including threat belief, protection motivation, decision set, adaptive plan, threat response, identified information need, information search plan and decision information (Sellnow & Seeger, 2021, p. 51). Each of these has an associated question, highlighting the human decision-making required with respect to personal protection and informing what details an alert issuer should consider including in a warning. People's behaviours in response to warning messages are also hindered by their abilities or inabilities, such as not owning a vehicle to heed evacuation warnings or not adhering to shelter in a basement direction if you live in a high-rise apartment. Once the recipient of warning messaging determines they are directly threatened, they must choose what, if any, imminent safety or protective actions they will take.

There are infinite possibilities for the type of warning messages that can be distributed to the public about unfolding or imminent events, and public reaction to such can be impacted by social, individual and environmental factors (Sutton, 2024). Public response is particularly important when one considers milling (Sutton et al., 2017, Sutton, 2024), to describe the public's actions in confirming the legitimacy of an emergency alert or warning prior to taking respective recommended action. This sentiment is echoed by Lindell and Perry (2012), whereby the public is determined to confirm an event is occurring, and takes the time to do so, despite possible personal safety risks associated.

Anxiety was noted in a study involving United States-based campus students who subscribed to receive crime alerts from their college (Wenjing & Newhagen, 2010, 2012). Despite the requirement for participants to subscribe to receive alerts from the system examined, the way the message was received had an impact, with alerts on cellular devices and laptops increasing participant anxiety. It has been determined that providing actionable advice within the emergency alert text decreases public anxiety (Perry & Lindell, 2003). While broader warning messages are used to help mitigate public harm, it is important to remember "…they also cause social and economic disruption, public concern and physical and psychological harm" (Sellnow & Seeger, p. 38). Research has shown, however, that public panic is "rarely, if ever," the result of warnings and that instead, referring back to decision making and milling, "…the more significant challenge is simply getting the public's attention about an emerging risk" (Sellnow & Seeger, 2021, p. 38).

Tan et al. (2019) noted that little research exists on non-emergency notification systems on users, which limits the understanding of overall human response. When considering all the communication tools available to the public during a crisis, information overload can occur, and

the lack of multi-tool integration contributes to this. In Mowbray's (2023) assessment of existing mobile phone emergency alert impact, it was found that the public had become desensitized to threat warnings, especially in cases where previous test messaging had been sent. The study concluded by acknowledging the benefit of emergency alerts and recommending further examination of their effectiveness on mobile devices, as well as a broader analysis of human behaviours and responses to emergency alerting. Given the severe circumstances for when an immediate emergency alert is distributed to the public in Canada, "If incorrect, late, or communicated ineffectively…warnings can cause needless disruption to communities and businesses as well as reduce effectiveness of later warnings" (Sellnow & Seeger, 2021, p. 37) despite there always being some level of uncertainty associated to a particular event.

When considering warning the public during mass emergency events using cellular device notification via application, Al-Akkad and Zimmermann (2011) found this approach was generally accepted by individuals they interviewed and contributed to the common good. These positive findings were balanced with feedback from participants who merely considered themselves observers to an event and associated alerting was "rather annoying" (p. 1). In the instance of an installed application on one's cellular device, contributors expressed concern in any associated gleaned personal data, "creating a surveillance society" (Al-Akkad & Zimmermann, 2011, p. 7) and ultimately desired to choose which personal data could be collected by the application and authorities.

Lynn (2022) examined Canada's NPAS and AMBER alerting. While not focusing specifically on imminent public safety threats, respondents did provide insight into public perception of alerts. The researcher found that even in the case of a child abduction, the public's perception is split, with some individuals defending use of the NPAS for such an event, while

others question whether the unsolicited intrusion is necessary (Lynn, 2022, p. 227). Critics of AMBER Alerts distributed via the NPAS justify the public's negative reactions to the broadcast immediate alert by "…espousing Liberty values, including the need for choice and the right to be free from unnecessary intrusions on personal lives and devices" and "rallied against the power the government and police have over their personal devices" (Lynn, 2023, p. 164 & 166).

As a caution, a study on the frequent use of the South Korean government's cellular device-based Korean Public Alert Service (KPAS), Lee et al. (2022) identified that initial use of the KPAS was adhered to; however, with increased use, the public became 'annoyed and insensitive' to alerting communication. While a public survey in the country identified the majority of respondents thought there was a need for alerting, an exponential increase in the number of alerts distributed to the Korean public during the Covid-19 pandemic resulted in negative perception of the communication tool. The authors explained that the public can process limited information and identifies information overload as spam, which is considered useless. Lee et al. (2022) label excessive issuance of KPAS alerts as the 'Spam Effect' (p. 6) with a solution being lowering the frequency of emergency alerts distributed – not eliminating them altogether.

Further public education is required about emergency alerting, as determined by Bean and Grevstad (2022) in their United States-focused national post-alert test survey. This is important given the public can opt out of receiving three out of four alert types distributed nationally in the United States, but it is unknown how many people have done so. It is unknown whether the public has been educated to realize the potential personal safety ramifications of opting out of receiving imminent safety threat alerts. Trust built resulting from public education

can ultimately quicken the public's response time to emergency situations and decrease
misconception and misunderstanding (Bean & Grevstad, 2022; Madden, 2015).

**Public Trust in Law Enforcement**

In a study conducted for the Government of Canada, it was found that public attitudes
towards Canadian police could be measured by analyzing responses to questions about
procedural justice, distributive justice, community engagement, bounded authority, effectiveness,
legitimacy, willingness to cooperate and overall trust and confidence (Jackson & Bradford,
2018). Jackson and Bradford (2018) analyze the practicalities of police not simply relying on, but
also requiring, public assistance to support ongoing investigations, such as tip generation or
evidence accumulation. "If the public do not trust the police, they are unlikely to cooperate in
these ways, and if people do not believe that the police have the right to exercise power, they are
unlikely to accept decisions and comply with police officers" (Jackson & Bradford, 2018, p. 5).
As Al-Akkad and Zimmermann (2011) note that beyond fire, medical or police emergency
responders, most people find "emergency situations are unusual and complex" (p. 1), and
analysis of emergency response assistance incorporating civilians is difficult to locate.
Additionally, Lynn (2023) examined online messaging featuring the public's critical perception
of being "deputised" by the police when a broadcast immediate AMBER alert is distributed,
including commentary such as "…it is not [the public's] job to assist in police work" (p. 183).

Abdi and Hashi (2024) examine modern policing models and public cooperation with the
police, relating law and order to police effectively carrying out their duties of crime control and
public order maintenance. This approach is critically important during imminent threat
situations, when the public must comply with police instructions for safety reasons. Public
cooperation is also important to maintain order, limit loss of life, and potentially generate tips

and information that can assist police in concluding an imminent safety situation sooner. Balancing this is the autonomy the public is given when in receipt of valuable and actionable information, particularly delivered via an alerting platform. Ethically, as Sellnow and Seeger (2021) discuss, the public can make their own choices with regard to undertaking personal risk, especially when provided enough detail to inform their decision making (p. 38).

An emergency alert warning message must contain information about the hazard, provide guidance, the time, location and source (Mileti & Sorensen, 1990). While unobservable, trust can be associated to behavioural compliance with police direction. When applied to the context of emergency alerting during imminent threat to life situations, trust can be linked to whether the public complies with the direction provided as part of alerting communication and, specifically, its source. For example, if an active shooter situation is known and local police distribute an emergency alert requesting the public to take immediate shelter, some members of the public may choose to forgo this advice, with respective actions linked to trust in or authority of the police. Ramifications in imminent threat situations can be significant, including potential loss of police officers or public lives.

Variations of the definition of trust have spanned decades of research on the subject, and Jackson and Bradford (2018) state that "…trust can be defined as the subjective judgement an individual makes about the likelihood that another person, organization or other corporate body will follow through with an expected and valued action under conditions of uncertainty" (p. 7). It is also important to note that different publics may have specific attitudes toward, or unique definitions of the term 'police.' This means that trust may reside in one specific police officer rather than in an entire policing organization or service. As Jackson and Bradford (2018) explain, "The 'knowledge' one has of the police may be garnered from many different sources" (p. 9).

Trust in a specific police officer or service can be further impacted by the extension of alerts into new jurisdictions. For example, if an emergency alert extends beyond the area of a police service's traditional jurisdiction and into another policing authority's area, the public trust dynamic may shift. While Mileti and Sorenson's 1990 research pre-dates modern public alerting communication methods, it provides important guidance: "Human judgement is still an important and necessary part of [alerting] decision-making…" (p. 55). This insight effectively ties police decision making to emergency alert distribution to specific person(s) at a police service. If the specific police organization is not trusted by the public, the person making the decision to distribute an emergency alert will also be deemed untrustworthy.

Emergency alerting via the NPAS is still relatively new, with wireless alerts only launched in 2018 (Public Safety Canada, 2020). Therefore, police use of emergency alerting is also relatively new. Key to linking public trust in the police and the novel use of emergency alerting during imminent public safety threats is the use of "clear, open and honest" communication – a public expectation of police, as noted by Jackson and Bradford (2019, p. 8). A positive aspect, identified by Mileti and Sorenson (1990), is that the public's insatiable appetite for information may result in attention to alert messages. As they state, "Emergency warnings of impending catastrophes convert an information-adverse public into a public that is information hungry…" (p. 55). In the case of police, the inherent nature of public curiosity may drive more attention to an imminent public safety threat.

Even information contained within Pelmorex Communication's Last Mile User Guide terms of conditions of use can be linked to themes of trust. As owners of the NAAD system, the infrastructure which distributes mandatory emergency alerts to the public, Pelmorex (2019) stated they do not guarantee that "…the messages contained in the emergency information

[alerts] are current, accurate, truthful or complete, or…that the emergency information will be available without interruption, error or omission" (p. 7). While public risk associated with weather-related and police events is dynamic, imminent and ever evolving, a tornado emergency alert may be deemed more trustworthy because the weather is directly observable in the issuance area. In the absence of physical police presence, the actual threat of a dangerous person may be unobservable to the general public, potentially impacting public response and adherence to actionable guidance distributed by the police as part of a public alerting message. Ultimately, public compliance with either of these scenarios is individual-specific.

In the absence of public trust, instructions and directions may not be followed, increasing risk to the public and potentially negatively impacting public trust over the longer term. Misuse of emergency alerting systems, such as overuse of broadcast-immediate mandatory alerts, can also impact public trust, directly tying public communication during emergency situations to public trust in the police.

**Law Enforcement Use of Emergency Alerting**

Canadian law enforcement should carefully consider the communication techniques and applications they utilize to warn the public about imminent threats to their safety, especially during crises. Early warning systems, such as emergency alerting tools, are essential to disaster preparedness (Harrison et al., 2022) and mitigating loss of life. Research has indicated the "public panic disaster myth" is often mistakenly referenced and confirms "Warnings rarely, if ever, cause panic" (Sellnow & Seeger, 2021, p. 38).

Resolution 2021-06 by the Canadian Association of Chiefs of Police (CACP) requested a review and improvement of the communications interoperability strategy for Canada, prioritizing the NPAS. The CACP urged Public Safety Canada to complete a comprehensive review of

interoperability in Canada in 2022, with a request to extend alerting authorities to first responder public safety agencies;" although this review has yet to take place (Public Safety Canada, 2021, p. 36). In a 2022 presentation by FPT Emergency Management obtained via Access to Information Act request, policing is listed as a key development in the public alerting landscape, identifying the need to consistently and systematically use the NPAS to warn of imminent threats (Public Safety Canada, 2021, p. 66).

It is not uncommon for disasters to result in recommendations for change. Davis et al., (2022) highlight the Portapique 2020 mass shooting and Nova Scotia's response to this tragic event. Recommendations resulting from the 2022 James Smith Cree Nation and Weldon mass casualty event highlight gaps in Canada's NPAS for police use (Government of Saskatchewan, 2023). Despite these concerns, there's a notable absence of academic research on Canadian law enforcement use of public alerting systems, especially mandatory, direct-to-public alerts distributed via the NPAS. In direct consultation with Jeannette Sutton, a renowned social scientist and scholar of emergency alerts and warnings at the University of Albany, New York, it was found that no known academics are researching Canadian law enforcement use of emergency alerting (Personal Communication, February 8, 2024).

While Lynn (2022) studies public perceptions of child abduction alerts in Canada, the policing perspective and public commentary beyond the scope of AMBER Alerts are not included. Existing research studies (e.g., Madden, 2015; Sheldon, 2018; Wenjing & Newhagen, 2012) focus on the advent of emergency alerting implemented on United States college campuses, notably following the deadly 2007 Virginia Polytechnic Institute and State University shooting in Blacksburg, Virginia. In the absence of existing research on law enforcement-

specific use of and related public response to emergency alerts, the analysis of college campus, subscription-based emergency alert tools became a secondary source of data.

Sheldon (2018) analyzed the influence of crisis type and how events are perceived as more serious by individuals in a campus setting receiving alerts. Ultimately, his examination determined that an alert about an on-campus shooting, an incident requiring a police response and investigation, was perceived to be more serious than imminent weather events, such as tornados. Further, he explains the impact of message content, noting that including enough relevant information in an alert is particularly important to help students make decisions when they are notified of a campus emergency. Wood et al. (2017) also discuss the importance of effective warning messages, citing that a delay in distributing clear, effective messages could yield life-threatening consequences.

Questions surrounding whether law enforcement will be heard as an authoritative voice amongst others during a crisis are significant to the overall context of warning the public. Freberg (2012) notes that increased public message compliance and respective actions are impacted by the information source on social media. The Commission into the April 2020 Nova Scotia mass casualty says, "In the absence of a singular recognized authoritative tool, there is a risk that the appropriate technologies and supporting procedures may not be in place to support a comprehensive and cohesive public alerting strategy" (Davis et al., 2022, p. 24). The message originator is relevant given the serious nature of the threats for which an emergency alert is distributed publicly. Credibility is further tied to the source of the message and will generate public response accordingly (Mowbray, 2023) in addition to the credibility of the messaging (Sellnow & Seeger, 2021, p. 46). Wenjing and Newhagen (2010, 2012) highlight the importance of campus police services aligning crime-specific language used in alert messaging with cross-

references to national FBI databases, which also supports information legitimacy. Further still, even in the case of subscription-based campus alerting tools, the receiver of warning messages still found them beneficial and avoided noted areas, even if the individual was not physically present on campus at the time of message receipt (Madden, 2015).

Madden's (2015) campus-based research highlights the necessity of speed in issuing crime alerts to subscribers, as message delays were ultimately noted by recipients. Further, the inclusion of geographical information was found to be essential in determining whether an alert message was relevant to the receiver or not and the increased volume of crime-based alerts distributed generated opinions that the respective college campus was becoming less safe.

Ultimately, social media use remains a common practice for Canadian police communicators during emergency situations (Davis et al., 2022) and generally, given "…the physical visibility of the police through traditional patrol alone is under threat…social media provides a contemporary opportunity to perform visibility in different ways…" (Jones et al., 2025, p. 8). Lynn's (2022) study provided insight into the most appropriate methods to disseminate AMBER Alerts. Again, while not associated to an imminent public safety threat, the examination interestingly found that television and radio (#1 and #2 respectively) outranked the NPAS (#4), despite the NPAS having the built-in ability to disseminate this broadcast immediate alert category via both these methods (p. 290). Social media (#3) also ranked higher than the NPAS (#4) in distributing AMBER Alerts. Of note, the study was completed prior to the 2020 Nova Scotia mass casualty, when RCMP were heavily criticized for not issuing an emergency alert for a dangerous person, and was completed after New Brunswick RCMP received positive feedback for solely using social media to communicate with the public during a 2014 active shooter situation in Moncton (Davis et al., 2022).

**Questioning a Practicable Way Forward**

Consideration should be given to the full host of communication methods, tools and tactics that can be prioritized and used by law enforcement to notify the public of imminent threats to life. Regardless of the platform, clear and informal alerting language was determined to reach a wider audience (Van de Velde et al, 2015). Referencing legitimate and trusted information sources is necessary to substantiate crises and public risk, with emphasis on messaging compliance being individual-specific. The online presence of legitimate agencies, such as law enforcement presence on social media, can further substantiate this, with Jones et al. (2025) finding, "The visibility of the police has been seen as an important aspect of police work, linked to their legitimacy, authority and the reassurance they provide to the public" (p. 8). However, despite all possible communication channels available and expedient notifications across these platforms, risk still exists and "…some proportion of the public, including the homeless, will not receive a warning message in a timely manner" (Sellnow & Seeger, 2021, p. 44). Moreover, accessibility should also be considered, with Inglis (2021) noting "…a truly efficient emergency alert system must be one that endeavors to make each alert as accessible and easy to understand as possible" (p. 28), incorporating Canadian bilingualism.

Further analysis of alerting fatigue is necessary to inform decision makers and approach to imminent safety threat situations. In a student campus alert system examination, Kim et al. (2019) highlight that student study participants were desensitized to emergency alert messages with many explaining the combination of irrelevant messaging and "…the frequency of test alerts caused them to take warning and alert messages less seriously" (p. 8). An individual's decision to take action on alert message instruction is in part reliant on their ability to interpret it as a personal threat and take protective action accordingly with past experience "...being far

away from the event or because they were practice drills" (Kim et al., 2019, p. 8) considered inhibiting factors.

Existing research highlights critical components of alerting platform usability, public response and campus-based law enforcement use of emergency alert communication tools. A significant literature gap remains for emergency alerting and the safety and security of Canadians. There is limited substantial science-based data and research to guide Canadian law enforcement when agencies consider what emergency alerting tools to use to notify the public about imminent threats to their safety and how to use them. This gap is especially important given the increasing use of the NPAS for issuing mandatory emergency alerts to the public, as noted. Additionally, it is unclear whether the Canadian public is aware of what alerting tools their local law enforcement uses to help keep them safe. In the absence of this vital data to unify police response nationally in Canada, a patchwork and weak communications response (Davis et al., 2022) could emerge, resulting in increased confusion and elevated safety threats to the general public in crisis situations. Addressing these gaps requires research into how law enforcement agencies navigate emergency alerting challenges and how public awareness, trust, and expectations shape their perceptions of police communication methods during emergencies.

**Chapter Two: Research Design**

**Methodology**

A convergent mixed methods design was selected to garner fulsome insight and incorporate both qualitative (semi-structured interviews) and quantitative (survey) methods of data collection. The aim of using this approach was to gain a deeper understanding of emergency alerting from the perspectives of police and the public separately, and at the same time, to analyze the findings to determine how the results inform the research questions. As Creswell and Creswell (2023) stated, "Qualitative research is an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem" (p 5). In this study, interviews were conducted to investigate RQ1: how Canadian police services navigate challenges, utilize tools, and meet public expectations when using emergency alerts to communicate during imminent safety threat situations. Creswell and Creswell (2023) also noted that, "A survey design provides a quantitative description of trends, attitudes, and opinions of a population, or tests for associations among variables of a population, by studying a sample of that population" (p. 158). In this study, the quantitative survey examined factors influencing public awareness, trust and expectations regarding police communication methods during urgent threat situations. There was an interrelated public expectation inquiry for both methods.

Data analysis occurred at three different phases of this mixed-method convergent design, "…with each dataset independently, when the comparison or transformation of the data occurs and after the comparison or transformation is completed" (Guetterman et al., 2015, p. 152). Combined qualitative and quantitative methodologies provided a comprehensive understanding of both institutional practices and public perceptions related to emergency alerting in Canada, versus what can be found simply using one standalone technique.

I intended to explore a subject that examined both the voices of police service participants and their subjective experience, and survey results of the opinions of the general Canadian public. This yielded a stronger understanding of the problems or misconceptions around police use of emergency alerts and communication during imminent safety threats from multiple key perspectives. It is generally understood that all research participants possessed diverse life and personal experiences at the time of data collection. In my opinion, qualitative findings held slightly more weight in the findings due to the rich data on subject matter insight from interview participants.

**Interviews**

*Data Collection Procedures*

**Data Collection Timeline.** I conducted English-only interviews between March 21 and May 30, 2025, at varying times of day, based on participant availability and Canadian time zone differences. The interview time commitment was advertised during recruitment as approximately one hour in length and interviews ultimately ranged from 38 to 57 minutes. Five interviews were conducted remotely via Microsoft Teams, one interview was conducted in-person and one written response to questions was provided. While I preferred interactive, semi-structured interviews, the written response was deemed important as the participant gave a unique perspective as the sole police service respondent for a targeted population demographic.

Overall, no major technical errors occurred; however, in at least two instances, Microsoft Teams' video feed froze, and I had to continue interviews with voice-only interaction. Interviewees in these instances did not note any significant deficiencies nor raise concerns.

Participants were required to agree to an informed consent process prior to the interview and could opt out of questions as desired, although none declined to do so. Additionally,

interviewees were permitted to withdraw at any moment while the interview was being

conducted and could withdraw from the study for up to three weeks post-interview, prior to data

analysis. No interview participants withdrew from the study.

A formal interview guide (Appendix A) informed my approach to semi-structured

interviews. I proactively disclosed my policing employment and role as an alert issuer as part of

this guide, confirming my role as a researcher. Participants were welcome to share their ideas

and knowledge freely. I asked three different streams of nine or ten questions to yield insight into

emergency alerting approach and considerations. To have consistent understanding, before each

interview began, I generally encouraged participant responses to reflect their current policing

approach to alerting. I also pre-defined terms for police-initiated public alerts, National Public

Alerting System, subscription-based emergency alerting tools and imminent or urgent threat to

public safety.

I conducted virtual interviews with participants situated in their respective workplaces.

Some wore police officer uniforms, while others were in civilian attire. I noted general interview

observations such as thoughts, feelings and experiences.

I anonymized participant identities and attributed each individual to randomly selected

and assigned alphabetized codes post-interview. It is my belief that anonymity positively

contributed to the study's interview participation rate.

**Participants.** The intent of the interview segment of the study was for me to address

RQ1 and learn firsthand accounts of emergency alerting experiences from law enforcement

agencies across Canada to help glean insight into navigation of challenges, utilizing tools, and

meeting public expectations during imminent safety threat situations. My goal was to conduct six

to 10 interviews with Canadian police services until saturation was reached. Participant recruitment criteria sought voluntary participants from Canadian police services who were considered subject matter experts in emergency alerting or response. I encouraged participants to share their ideas and knowledge freely.

Initially, I conducted interview recruitment via scripted recruitment messages sent via my university email to publicly available contact details for police chiefs, public, or media relations. As a last resort, I sent messages to general public inquiry forms on police service websites when no other means of email contact were available. I made follow-up phone calls directly to the previously emailed police services and left phone messages with police public relations personnel following initial low uptake and response to emails. I sent another round of email inquiry to secondary police agency contacts.

The aim was for the sample to be comprised of participants working in law enforcement agencies from across the five regions identified in the survey and aligned with the appropriate community population (see survey question 2 in Appendix B).

Beyond the community population demographics noted, police service selection was random in nature. Wikipedia's *List of Law Enforcement Agencies in Canada* and Canada's First Nations Chiefs of Police Association webpages assisted in initial identification of potential police service participants. Following this, I selected random police services from those listed, categorized according to 2021 Statistics Canada community population size and linked to the study's survey community population targets. Each population category had multiple police services selected in the event no response was received during initial outreach. Interview participant recruitment began once I received ethics clearance from Mount Saint Vincent University's Research Ethics Board.

In total, I contacted 21 police services via email or phone requesting an interview and ultimately conducted seven interviews with eight participants. One police service interview included two participants having diverse, yet pertinent, roles during imminent safety threat situations. Six interviewees identified as serving police officers, and two identified as civilian employees. Interview participants represented police services that varied in size to provide differing perspectives. For example, police services represented ranged from having just over forty to thousands of sworn police officers and civilian staff – specific numbers are not included to maintain participant anonymity.

While one of my research goals, and ethics clearance was received for, was a possible interview conducted with a First Nations police service, no response was received from those I contacted. Agencies policing rural or remote areas with a population of less than 1,000 were also difficult to locate, with few contacts found. One police service representing this category had even dissolved in 2024, its policing jurisdiction assumed by the RCMP. All agencies I contacted that police the 30,000 and 99,999 population demographics declined to participate.

General police service rejections cited that they are often invited to participate in academic studies and have no capacity to do so. Other agencies expressed that while they were interested in the findings of this study, they felt they could not provide me with the level of detail in alerts they anticipated I sought. Some police services cited they could not directly distribute emergency alerts to the public and utilized the RCMP or provincial Emergency Management Officials (EMO) to do so; therefore, they felt they could not provide the specific insight required to fulfill my request. Following multiple responses received expressing same, I sought supplementary ethics approval for interviewing provincial or territorial EMO's. Despite me contacting five separate provincial or territorial EMO's or respective media relations offices, all

declined to participate in an interview on emergency alerting, referred back to police services who had initially deferred to them or failed to respond to my inquiries altogether.

I sought supplementary ethics clearance for an interview with the chair of the CACP Emergency Alerting Subcommittee. I included the subcommittee perspective as a bridge, representing those police services not interviewed, to provide overarching insight into the Canadian emergency alerting landscape from a governance and policing perspective. The Subcommittee was created in May 2024 and consists of police service and Defence, Research and Development Canada representatives. The CACP Subcommittee guides and makes recommendations to advance police emergency alerting best practices and consistency, fosters relationships and information exchange and advocates for police representation on key national committees.

**Reliability and Validity of Data Collection Procedures.** I made efforts to ensure the reliability and validity of the data collected because, as noted by Sharma et al. (2023), "By using multiple methods to collect and analyze data, researchers increase the validity and reliability of their findings, as each method provides a different point of view on the research problem" (p. 5).

I conducted interviews with key police personnel who have an emergency alerting role at their respective service. All interviewees were directly associated with emergency alerting within their police service to ensure the data collected was relevant and reliable. I re-reviewed and cleaned the interview transcripts before examining them. To ensure qualitative validity, I collected and analyzed rich, detailed data, which I presented in the findings using descriptive quotes and a fulsome summary of geographic and demographic insight. Interview transcripts preserve participant language.

My interview protocol consisted of five to 10 questions and probes – the exact number of questions asked depended upon participant responses. I followed the protocol to ensure consistency and probe questions were used to generate a meaningful understanding of participant responses or to ensure my understanding or accuracy of the information provided. To maintain trust with participants, safeguarding identities was of significant importance. Once I verified interview transcripts, I anonymized and redacted identity information and deleted the original new media files.

In addition to transcripts, I recorded field notes during interviews. I established an observation protocol (Appendix A) and recorded reflexive notes, such as descriptions of physical settings, my thoughts and impressions. Additionally, during the course of quantitative data analysis, I generated coding memos, identifying areas for further exploration and notes on code language modification.

Within the Role of the Researcher section of this chapter, I openly and honestly articulated my position working for a police service and as an emergency alert issuer. I fully recognize that my personal experiences encouraged subject matter inquiry. However, this should not be considered negatively, given the study intends to further emergency alerting insight and best practices for Canadian police as a whole, in the absence of greater academic inquiry. In fact, the alerting and policing-related experience I bring, in addition to ongoing subject matter examination throughout my graduate studies, may be considered prolonged time spent in the field. As interview participants were required to have a direct role in emergency alerting, it is reasonable to believe the responses they provided are valid and derived based on experience.

Finally, my thesis advisor thoroughly reviewed all the codes and themes identified as part of this study. This review provides an unbiased examination of the subject matter and any validity or reliability concerns noted.

### Data Analysis Procedures: Interviews

I used Microsoft Teams software to transcribe the interview recordings. Data cleaning included re-listening to the interviews in totality and rectifying any errors in generated transcripts to ensure their accuracy. A secondary process of redacting data was completed, where I anonymized the interviews. This involved compiling general information about participants, such as police service size, zones or regions, geography and scope of work, into a separate combined document. This step was important for anonymization and was subsequently redacted from individual interview transcripts. Once cleaning and redactions were complete, I deleted original interview video and audio files.

Using data analysis steps outlined by Creswell and Creswell (2022), I reviewed interview transcripts to generate an overarching understanding of information gleaned from interviewees. Emphasis was placed on responses and insight given unprompted or probed with enthusiasm. Open coding consisted of analyzing all interviews and organizing them by labels. Using interview transcript examination, I identified open codes and input them into a Microsoft Excel table and assigned a colour code.

Following the interview transcript assessment, I highlighted the applicable codes identified. After the final interview transcript examination was complete, I re-examined previously reviewed interview transcripts to verify that all codes were applied consistently. The next step, axial coding, provided further insight by grouping the open codes identified into wider categories based on relationships or connections. I examined themes where repetition, patterns or

consistencies were noted and patterns emerged, and categorized them into axial codes. After this process, I interpreted and defined themes, consistently considering the study's research goal and participants' subjective experiences and opinions throughout the process.

**Survey**

*Data Collection Procedures*

**Data Collection Timeline.** The creation of a cross-sectional survey, with data collected within a short period of time, was intended to be gathered during the approximate timeline as interviews were conducted with Canadian police service representatives. The survey design was initially completed as part of my graduate-level research methods course, affording the opportunity to conduct a survey test. Using convenience sampling, I received 11 responses to the initial survey test following its completion in March, 2024. This resulted in modifications to the survey. Following the pre-test survey analysis, I recognized the immense task of meeting sampling proportions proportionate to Canada's population and dispersion. To mitigate this and increase survey legitimacy, I contracted Montreal, Canada market research firm Leger Marketing Inc. (hereinafter referred to as Leger) in early 2025 to collect the quantitative data for this study using their online survey platform Leger Opinion Panel, also known as LEO. All survey data was stored on Leger's Canadian servers. Leger incorporated the cost of survey coding into the overall project, limiting costs assumed by the investigator. No financial support was received to cover survey costs.

Given the complexities of making the Leger survey available to external parties, survey participants were only recruited via Leger's Leo platform and not via my personal networks, academic pools or policing organizations as initially intended. Leger and I both signed a confidentiality agreement, which highlighted the summary of the service provided and ensured

the confidentiality of survey data collected. The agreement outlined my expectations that all survey data would be destroyed by Leger within 12 months, among other points.

Individuals consent to be contacted via LEO, Canada's largest proprietary panel, for opinion-based research (Leger, 2025, p. 2). Leger (2025) "uses software in accordance with Canadian census data to generate representative samples of the population" (p. 7) and screened all possible participants based on criteria. An algorithm identified who met primary variables and targets, a random sample pool was identified and target groups were distributed the survey.

The English-only quantitative survey (Appendix B) was launched via LEO on April 1 and closed on April 10, 2025. Survey respondents' personal or identifying information cannot be accessed as per Leger's strict standards of ethics and confidentiality. The data provided was anonymized to protect participant privacy. I noted in the survey informed consent that the time requirement for survey completion was approximately four minutes, and participants were required to respond to the survey questions using personal devices.

Google Trends Canada analysis from the period of April 1-10, 2025 inclusive did not indicate any substantial or noteworthy subject(s) which would have impacted or influenced survey responses. Canadian web and news search terms included "alert," "emergency alert" and "police," with no queries having enough data to provide insight or having unrelated context. I connect this with participants not having any imminent experiences which influenced their survey responses.

The survey consisted of categorical and continuous data lines of inquiry, in addition to open-ended questions that offered an opportunity for interviewees' perspectives in their own words. To begin, the survey included five demographic questions about the province or territory

the respondent lived in at the time of survey completion, the population group of the location

they lived, the age group they belonged to, their gender, and whether they were employed by a

Canadian police service. To inform survey participants, factual content questions were prefaced

by a definition of 'urgent threat to life situations:' urgent situations when police would respond,

such as an active shooter or dangerous person, where there is an urgent risk to public safety.

Questions inquired if respondents knew who their local police were, how their local police

communicated about urgent threat situations, whether or not local police distribute emergency

alerts to their phones, how they received emergency alerts from their local police, and the

distance parameter expectation for police notifying of an urgent safety threat. Two questions

collected continuous data, inquiring about local police trust and whether police do a good job

educating the public about alerting. A multi-select survey question inquired asked about the top

tools respondents expected police to use to communicate when an urgent threat is unfolding. The

last open survey question inquired if the respondent had any other comments or opinions to share

about police use of emergency alerts.

**Participants and Response Rate.** The intent of the survey (Appendix B) segment of this

study was for me to glean the public's perspective on emergency alerting as a communication

tool during urgent safety threat situations. Recruitment criteria sought voluntary participants who

lived in Canada. I required survey participants to live in Canada, as indicated in the

demographics questions. The language I used was strategic, as people do not require Canadian

citizenship to receive emergency alerts via the National Public Alerting System, nor must they

subscribe to receive them. To receive emergency alerts via the NPAS, one is required to have an

active cellular device within a geographically targeted alert distribution area.

Leger compensates all voluntary survey participants on their LEO survey platform – this is mandatory for all Leger clients and conforms to industry standards to calculate the rewards offered. Every survey respondent received 'LEO Points' which are deposited in their respective account no later than 30 days after survey completion. LEO Points hold no monetary value and cannot be used for any purpose other than to be redeemed for prepared gift cards, among other rewards, once the Leger-implemented minimum points amount requirement is met. For participation in this research study, survey respondents received LEO Points equivalent to $0.10 per survey minute, which was managed in full by Leger. If participants chose not to complete the survey, they were not compensated with LEO Points.

I required participants to sign an online informed consent. The informed consent mandated agreement to participate prior to proceeding with the survey and outlined the study's length, procedures, potential risks and benefits.

I divided the respondent ages into the following groupings: under 19, 19-25, 26-35, 36-45, 46-54, 55-65 and 65+ years of age. 65+ was not included in survey results, in addition to under 19, who I considered youth at the time of the conducted survey; their participation was terminated. I welcomed male, female and non-binary respondents to participate with an aim of equal distribution amongst genders. The survey proceeded once I received ethics clearance from Mount Saint Vincent University's Research Ethics Board.

The response rate was specifically identified and quotas filled as per the minimum survey targets per region via the contracted LEO survey platform. Leger collected more data than requested to afford flexibility in removal of low-quality or unusable data. Any additional completes were over and above the survey targets per region and were not included in the findings delivered.

Invitations to participate in the survey were standardized by Leger, and "To ensure invitations do not introduce any bias, all the information on the invitations is generic. It includes the subject (generic), survey length, number of LEO points they will receive for completing the survey and the date the survey will close" (Leger, 2022).

Participants were required to respond to all questions in the survey to ensure the data collected provided enough information to inform the study. Participants could withdraw during the survey completion period only. Because the survey was anonymous, participants who wanted to withdraw from the study were required to exit the survey window without submitting their response. Once a participant's individual survey response was submitted, there was no option to redact it given anonymity. Some survey respondents may have chosen to exit the survey window prior to completing their response, thereby withdrawing. In total, 486 people were surveyed as part of this study.

I examined filter questions, such as age group and whether a respondent was employed by the police, during the 2024 survey pre-test. I kept these lines of inquiry for survey data collected by Leger.

The LEO points-based incentive was beneficial for generating participant interest in the survey. Although it cannot be measured, I suspect the exact same sample sizes, dispersion and ratios would have been very challenging to secure in the absence of Leger survey support.

**Reliability and Validity of Data Collection Procedures**

To ensure the reliability and validity of the quantitative portion of this mixed-methods study, I included both closed-ended and open-ended survey questions to enhance validity by measuring public response. To ensure content validity for the quantitative survey, questions were

specifically focused on participants' experiences with police use of emergency alerting, rather than emergency alerting or policing in general, aligning with the study's intent. This provided reliable data that can be generalized to specific population groups identified within the survey. I also recognized that every survey participant approached the questions with their own unique bias, viewpoint and experience, which can influence responses. For instance, I could not know whether a survey respondent had received a police-distributed emergency alert in their lifetime or was victimized in a situation that resulted in an alert prior to partaking in the survey. Full survey administration details are outlined in the methodology section of this study.

Generally, sampling is a consideration, given that responses did not reflect the opinions and experiences of the population as a whole. I measured whether a respondent was employed by a Canadian police service using a demographic question to inform bias. For example, if many participants responded 'yes,' this could affect the overall findings. Additionally, individual contributions may have been limited to simulated scenarios if respondents have not personally experienced an urgent threat situation.

**Ethical Considerations**

My initial research proposal was reviewed and approved by the study's thesis committee prior to submission to the Mount Saint Vincent University Research Ethics Board (REB). The Mount Saint Vincent University REB reviewed the mixed methods research proposal. It confirmed it respected the Ethical Conduct for Research Involving Humans and Mount Saint Vincent's University's policies, procedures and guidelines for ethics relating to human-involved research participants prior to participant recruitment. A certificate of research ethics clearance for the study was initially granted on February 7, 2025, following minor revisions to the submission. Ethics clearance was subsequently reapproved on March 26, 2025 and May 2, 2025

following two separate revisions submissions based on the scope of study and further inquiry potential. These revisions resulted in additions to both the survey and interview components.

My initial intent was to recruit one Indigenous police service to participate in an interview. Given that all interview participants were anonymized and identified via codename, this ultimately eliminated any identifying connection to Indigenous policing or Indigenous communities specifically. One question in the quantitative survey inquired about where participants live in Canada, with the response "I live in an Indigenous community." Respondents who selected this response were ultimately anonymized via the province or territory in which they lived. Inclusion of Indigenous participants or populations in qualitative and quantitative research was included in all approved REB submissions.

Safeguards for research participants were employed, including anonymized identities. In the survey, respondents' personal or identifying information was anonymized as per the contracted market research company's strict standards of ethics and confidentiality. I was aware of interview participant identities given my role in the recruitment and interview process. All participants were subsequently assigned, and any quotes or insights were attributed to, individual participant identifiers or codes. This approach allowed for greater exploration of opinions and experience-based participant responses. Participant informed consent included details on identifiers or codes used and noted that some information included in the study may indicate general geographic characteristics of their police service encounters. Insight garnered from Canadian Police College and CACP Emergency Alerting Subcommittee representatives does not have names attributed, but the organization or group they represent is identified to provide context to their words.

**Role of the Researcher**

As a result of my experience as an emergency alert issuer and as an employee with the Saskatchewan RCMP, I have a direct understanding of the challenges and experiences of this role, have distributed public alerts or contributed to imminent safety threat situations or investigations where emergency alerts have successfully helped locate suspects, AMBER Alert victims or warned the public during a mass casualty event. My employment is at the very core of identifying risk in the area of public alerting, specifically with regard to imminent threats to public safety and the lack of academic inquiry into emergency alerting, especially with a focus on Canada. This risk must be mitigated. While I did my best to bring objectivity to the study, I fully acknowledge that my biases may shape my perception, approach to and interpretation of data collected and analyzed. I have done my best to mitigate this individually and through guidance received from my thesis supervisor and board. My biases aim to contribute to the research with a goal of being useful versus detrimental, having my experience enhance my knowledge, sensitivity, awareness of challenges, gaps and decisions personally encountered.

I was not compensated to undertake this study. I articulated my police employment in this study's ethics application and disclosed this to all interview subjects. This is important due to existing relationships that may be considered backyard research. I acknowledge that the rapport of my personal policing experience and relationships may have helped garner police participation in this study. Given that research on emergency alerting is minimal, so too is the group advocating for alerting change within Canada. All interviews were led by a Research Ethics Board-approved guide for a consistent approach. This qualitative insight was especially important to me as police processes and investigative insight are often shrouded in mystery. Additionally, I represent the Saskatchewan RCMP on the CACP Emergency Alerting

Subcommittee, where I do not hold a position of authority. My Mount Saint Vincent University email address and my personal phone number were used for communication with study participants.

Given the 54 civil emergency alerts distributed to the public in 2024 alone (Alert Ready, 2025), it is only a matter of time before another tragedy occurs within Canada's borders – or beyond. It is unknown whether the responding police service will be prepared to communicate with the public to help keep them safe, and whether the public will respond to the notification. Being nimble in response can be afforded, in part, by the research that informs police personnel and any action or preparation they deem necessary.

**Chapter Three: Results**

**Interviews**

***Geographic, Demographic, and Police Service Insight***

Given that interview research participants were anonymized, a rich, overarching perspective of the police services gave context to the study's theme analysis. This insight afforded an overarching perspective on what the participant police services encounter on a daily basis, even beyond the scope of emergency alerting, including socioeconomic and geographic considerations of their work.

As previously discussed, eight interviewees participated in the interviews conducted. While I did not report participant years of experience, one interviewee referenced previous use of fax trees to communicate with local news agencies, and now utilizes many social media channels to reach the public with messaging directly. Participants represented police services with just over forty to 400 to thousands of sworn police officers and civilian staff – specific numbers were not provided to maintain participant anonymity. One participant described their agency receiving a range of 130 to 250 calls for service within a 24-hour period. Another participant shared that in 2024, their officers responded to just under 90,000 calls for service, up by 10,000 calls for service in 2023. A participant described public calls for service to their agency as broad, with reports ranging from "I don't like my neighbour" to "someone's been shot" to "why aren't you guys doing anything about this?"

Policing served various populations over both large and small geographic areas, some urban and some rural, including suburbs, farmers' fields, waterways and major roads. Some participants mentioned they experienced challenges in relation to population growth in their jurisdiction with some of the smallest-sized areas they police experiencing the most calls for

service. In municipal jurisdictions, depending on what was happening, participants described that officers could respond to calls for service within several minutes, whereas response in rural areas could be 45+ minutes to an hour or more – and even this response time was dependent upon the location of the closest officer available and their location when starting the drive to a call for service. Further still, geographic isolation was described as being a challenging factor when a police service had to "scale up" quickly in response to a major disaster or emergency.

Some participants described a "patchwork quilt" approach to policing, being a standalone service delivering full policing services to their area, yet partnered with neighbouring emergency services to respond collaboratively to significant events or investigations. This collaboration, in some instances related to "cobbled together teams" of standalone neighbouring police services, each contributed subject matter experts to larger, joint specialized teams, such as for emergency response. While policing communities was recognized as being a core duty offered by their service, some participants acknowledged the extra responsibilities or "collateral duties" placed upon their officers to build up police response or specialized teams for various incidents, such as tactical teams. Further still, some participants acknowledged they were fortunate to have full teams of employees fulfilling policing services in totality, having dedicated teams and support services fully available within their service, including forensics and major crimes, among others.

When describing the socioeconomic considerations of their local community and thus, their police service, participants acknowledged the presence and impacts of poverty, drugs, weapons, addiction, houselessness, violence and property crimes, among others. Mental health crisis and intimate partner violence-related events were also named as high in prevalence. Participants acknowledged their agency serves a range of clients such as affluent populations, including young persons to older retirees, to lower socioeconomic situations and the presence of

very transient populations. Of the area their agency serves, one participant acknowledged, "There's a lot of work here for a police officer." Some participants highlighted increasing new immigrant and Indigenous populations in some jurisdictions, as well as overall population growth pressures.

When asked about unique impacts on local population, some participants described influxes of people associated with large, local public institutions, such as post-secondary school attendance, especially during the fall through spring months. Factors named which impact local population included seasonally employed workers, local to international tourism, sporting events, one-time or annual festivals or celebrations such as Canada Day, protests and even the weather or natural disasters. Participants noted these factors could impact police operations and response.

**Interview Findings**

Guided by Creswell and Creswell, (2022), I identified 75 open codes during the review of the data collected. Axial coding was used to organize the open codes into four general categories and four themes generated which provided holistic interview insight. The term "police" referred to law enforcement generally and not police officers specifically given that civilians employed in policing may also be authorized in emergency alerting. Four themes and definitions resulted:

1. Personal knowledge and experience.

    a. Police preparedness and/or investigative experience affect the approach to emergency alerting during an imminent safety threat situation.

2. Strategy and risk impacts on police decision making.

    a. The police must weigh emergency alerting risk and the responsibilities of public safety during an imminent safety threat situation.

3. External influence on emergency alerting.

  a. Emergency alerting has external influences beyond the scope of the police.

4. Alerting approach differs across agencies.

  a. Police use of emergency alerting as a communication tool is impacted by a

   service's overall approach to and knowledge of emergency alerting.

### *Personal Knowledge and Experience*

The personal knowledge and experience theme was defined as: police preparedness and/or investigative experience affect the approach to emergency alerting during an imminent safety threat situation.

When it comes to preparedness, participants provided insight into steps they or their respective police services have taken to enhance their operational readiness. In some instances, I was given specific examples of past critical incidents or investigations where best practices were gleaned – the Portapique mass casualty in 2020 was referenced most frequently, "And if we're not learning from [Portapique], then we're doing ourselves a disadvantage and our community a disadvantage" (Participant J). Participant F highlighted the uniqueness of situational circumstances, "Each time we issue an alert, we are constantly learning something, but I think that is also part of the process because every situation is not the same."

Being prepared also meant involvement from the early stages of an unfolding event, so that response times can be expedited. Participant H commented:

 …once I receive information that an event, a criminal threat, is occurring, my

 mind immediately starts checking boxes. What do we have here? Do we have

 containment? Do we have a weapon? A vehicle? Like what are the factors at play and

what level of control, or containment do we have at this stage?...once I have

information that I'm able to determine that we do not have a level of containment or

control over a scenario, well, I'm pretty much going to pull up the Alert Ready

message and start filling it out so that I'm not wasting any time.

Preparedness also emerged in the form of emergency alert template creation. Participant

Y gave the example of having messaging "ready to go" in the event a riot broke out connected to

a planned event in their jurisdiction. The Vancouver Stanley Cup riot in 2011 is a relevant

example in this regard, when pandemonium occurred in the City of Vancouver after the

Canucks' game seven loss to the Boston Bruins. Beyond templates, Participant J pointed out the

August 31, 2026 expiry of Pelmorex's administrative broadcasting license renewal and potential

for alerting gaps. Their police service has made efforts to secure tools they will have in place to

communicate beyond Alert Ready, should there be a gap in its availability. Participant S candidly

remarked, "That's the one thing that probably keeps me up at night is wondering if we're really

prepared to do [alerting] properly."

In a policing environment, an officer's response can be influenced by career experience

and investigative perspective during an imminent safety threat. As Participant K pointed out,

notifying the public by emergency alert about an unfolding event also means notification to a

suspect and the complexities of this, potentially making an investigator's job more difficult.

Canada's Crime Severity Index (2023) continues to be high and one participant noted that

emergent issues occur almost daily in their jurisdiction. It is challenging to "parse" what's real,

what's not and what action should be taken. Participant F echoed this and cited the need to have

accurate information to provide before an alert is distributed. Participant J said, "…in the world

of everything being instant, the right information can't be instant…if we were to create an alert

every single time, that as soon as it comes in as the 911 call, people would be throwing their phones out the window." Operating in a "very highly uncertain area" is commonplace for some investigators. Participant K expressed, "I've spent a whole career in [policing] and never once was I 100% sure that something was going to happen, particularly when it's in that threats realm." Participant Q additionally said the public must be patient with police, especially if they are a smaller service and responding to an imminent safety threat, the reality being potential delays in responding to other calls for service due to focused response on the unfolding event.

Participant P stated that the number of experienced Critical Incident Commanders (CIC) within their police service, trained to lead response to an imminent safety threat, has continued to increase. The national two-week CIC course offered by the Canadian Police College has a failure rate of around 33%. It is currently the only means of training accredited CICs in the country (Canadian Police College, personal communication, May 2, 2025). The role of a CIC in public alerting was referenced more than once by interviewees, with some CICs leading alert decision making during rapidly unfolding events. The national CIC course, currently being revised, does not focus on mass casualty events. Incorporation of alert decision making, which is unique for every police service, is planned to be part of future scenario training exercises, and will cite the need for all CICs-in-training to know the intricacies of their individual, in-agency alerting protocols.

### Strategy and Risk Impacts on Police Decision Making

The theme of strategy and risk impacts on police decision making was defined as: the police must weigh emergency alerting risk and the responsibilities of public safety during an imminent safety threat situation.

Participant P provided perspective that every time their police service is called, there is an inherent risk associated and their goal is to minimize that risk, "…bring it from chaos to control. It's a lot more difficult sometimes than people can appreciate." When asked why their agency uses the National Public Alert System, Participant Q responded, "…to reach as many people as possible that could potentially be impacted by the immediate threat, as well as reaching as many people as possible that could potentially create a strain on the resources required to deal with the immediate threat."

Participant K discussed how actionable information can trump other considerations when it could effectively protect people. Another challenge and dynamic they described was:

> …like 30 minutes in the lifespan of a critical incident…is an eternity, both from a, from like a safety perspective, but just in an evolving information, kind of, area. So what, what we put in that form to fill out at 10 a.m., it could be entirely different at 10:30. And we can talk about the, the emotion you can be at. We might make that decision to notify the public, we might start into this process, but, you know, 10 minutes into the process the information might have changed. So, what information are we sharing? Are we sharing information from right now, or from 10 minutes ago? And sometimes, we're chasing that edge of, like, what is the current information for so long that we actually, you know, never get the window to send [an alert].

Participant K remarked, "When something comes to us, like, immediately, and it sounds very severe. Such a small window of time and really limited resources to try to get more information. Just kind of get these hand grenades dropped in our lap. You gotta decide whether you know, like, throw it or dive on it. And you gotta do that right now." While a situation

unfolds in one area, police services must be alive to the fact that another event may develop elsewhere. Participant P stated that during an unfolding situation:

> …we're still responding to calls for service of different priorities and [must] be able to respond to the same type of call somewhere else in the city...patrol cars that aren't on a perimeter or involved in that [initial] call, now would be dedicated to answering to the needs for the calls for service for the rest of the city while that's happening.

Strategic considerations discussed for large, urban areas included the unlikely circumstance where major malls, schools, universities or government offices would close due to an unfolding event. Participants shared the impacts of any closures related to the event, such as highways inundated and traffic at a standstill due to mass exodus, may be more complex for police to manage than the active threat. Emergency personnel – police, fire, emergency medical services - may not be able to proceed through a mass of evacuating vehicles and the implicated public could be more exposed than if they'd remained in their offices or safe locations. Participant S shared similar concerns, "A lot of times in crises, you're also trying to balance not having a lot of people perhaps descend on a location…there are limitations and sometimes there's some strategy around what we do share [publicly] – so as not to make the situation worse."

Several interviewees discussed the impacts of increased critical or mass casualty incidents involving police as of late, which directed attention to the NPAS programme. Participant H discussed the reality that an emergency alert may influence investigations in the future:

…as a result of events that have happened, you know, in the country, in recent, I would say within the past five to seven years, is police services have shifted to a public protection perspective. You know, we're kind of sacrificing a criminal investigation to ensure that our community can protect themselves and be safe.

Participant Y considered how past tragedies in Canada and the "court of public opinion" impact whether or not their service may distribute an emergency alert, "…would I rather be sitting at an inquiry saying why I didn't use [an alert]? Or talk to some other authority, wondering why I did use it? And it was easier for me to formulate a reason to anything less than an inquiry…"

One participant noted that sharing unreliable, unconfirmed information would result in the public becoming "…quite deaf to emergency broadcasts from the police because most of them would not be legitimate." Another participant echoed concerns about fatigue, noting that when alerts are untrue, they "…erode the power and the importance of alerting. Using this tool to alert – whenever we use this – it should be the last gasp. It should be, we need your help." Another interviewee contributed that the impact of emergency alerts would be compromised if alerts were sent out for every incident where the public may believe they are required.

Many interview participants shared that emergency alerting via the NPAS is necessary because it reaches people no matter if they switch their contact details. Participant Q noted that despite best efforts, "The alert won't reach everyone."

### External Influence on Emergency Alerting

The theme of external influence on emergency alerting was defined as: emergency alerting has external influences beyond the scope of the police. External influences identified via

coding were geographic, interoperability, public expectation and traditional or social media related.

Geographic and demographic complexities, which I noted in depth previously, were frequently raised during interviews. In particular, drive times could cover significant distance. One participant shared that proximity and remoteness played a role in decision making for an event which occurred a significant distance away, making police response a "totally different ball game."

Nearly all participants shared a different process and steps for enacting emergency alerting protocols. Some services had direct access to the National Alert Aggregation and Dissemination System to distribute emergency alerts to the public, some worked directly with the RCMP in their province who had been delegated direct access and others collaborated with their respective EMO to distribute alerts. The CACP Emergency Alerting Subcommittee chair shared overarching perspective on current alerting approach:

> …because the National Public Alert System is a tool used by federal, provincial and territorial governments, the delegation of the authority to use the national public alert system is given by the provincial or territorial EMO, so it's really up to the province or territory to decide whether the law enforcement agency is going to have direct access to the National Public Alert System or whether the law enforcement agency will have to go through the Emergency Management Organization to have alerts issued directly through them.

Several interviewees expressed the benefits of working with an alert-issuing partner. Participant H gave an example of how, during an unfolding event, they may be in their office

with multiple phones on speaker and computer chats open with different partners reviewing alert content together, "So we're all understanding exactly what is said in this message, so that when I sent it, upon approval, it can pretty much make its way directly outward." Another agency that served as an alert issuer for others, commented on the decision trees they have in place to empower their commanders when approached by other agencies to distribute an alert. They commented, "We have faced challenges where some policing services disagree with the decision…" Public reports documented disagreements of this nature.

Interviewees who navigated working with external agencies to have an emergency alert distributed noted that time was a prevalent concern. In one instance, there were noted difficulties with a police service getting in contact with an alert issuing partner, which impacted their agency's confidence in them moving forward. An interviewee mentioned up to a possible 90-minute delay working with an external partner to distribute an alert. Another pointed out "most people would probably be surprised to hear," there's at least a 30-minute alerting delay and advanced phone calls need to occur to their alerting partner to "make sure somebody's awake and checking their email" to receive the alert content; "…this isn't something that's going to happen within five minutes." Yet, other participants expressed discouragement about having to navigate external partner intricacies in order to potentially distribute an emergency alert to the public, even exploring subscription-based tools to help achieve interim communication goals.

Public expectation generated substantial commentary from all police services, beyond the scope of speed to distribute an emergency alert. One interviewee observed, "Public expectation shapes how we do business…" without care for budgets, staff shortages and police capacity comparisons. "…people's expectation is that we just share information as soon as we have

it…without assessing its credibility or what you might expect people to do with it," Participant K said. Participant P echoed this lack of public or partner understanding about urgency:

> Their perception is that why didn't [the police] do this right away, or why did they, they should have waited longer, right? Whereas they do not have all the intimate details of the investigation of those decisions that are made in real time.

The public's lack of understanding of police emergency alert authorization and process was a challenge voiced by Participant H, among others:

> Once you hit start on the clock, from the beginning of an incident to the time where an alert may be issued…there's been fluidity, there's been information sharing, there's been, you know, a plethora of discussion around whether we've met a threshold and where we stand with the information we have, that won't be known to the public or any real, you know, outside of police operations.

Participant Q stated that public alerting also included potential risk to the issuing police service, such as "accountability or legal issues." It was also remarked that communication gaps still exist across Canada. There may be delays in alert messages reaching every member of the public via cell phone, computer, TV or radio, possibly impacting public safety. Participant F commented that the public needs to maintain an awareness of emergency alerting or they face the risk of becoming complacent, "To be able to recognize the importance, the role, the impact in which them following the directions received or helping locate someone can actually have…" Two participants felt they appropriately managed emergency alerting consideration and risk decision making, despite being faced with potential public criticism or "flack." Participant Y noted that public commentary related to the time of day when an alert is distributed weighs on

them personally, but overall, "…I don't care what [the public] think. If I need to put out an alert, I'm putting it out."

Other tools considered when emergency alerting included social, websites and news media. Multiple participants noted their agency used these tools to further communicate with the public during an unfolding event. Some discussed having a positive relationship with their local media, while others had distrust - still sharing information with them, but leaning on their own public-facing police communication channels to also give information about unfolding events. From an investigational context, Participant K commented that social media can also impact an ongoing investigation, sharing an example where some investigative details may become known by the public and by the time their service could inform further, the threat was deemed non-credible. Participant J reflected on how various injects into an unfolding situation on various platforms, such as social media, can derail or obscure information in the public realm.

### *Alerting Approach Differs Across Police Services*

Alerting approach differs across police services, with the theme defined as: police use of emergency alerting as a communication tool is impacted by a service's overall approach to and knowledge of emergency alerting.

Previous theme findings discussed the varied methods which exist across Canada for issuance of an emergency alert. To expand, several interviewees shared that their local alerting process, even if considered "good," is not immediate, with the technical NAAD system used for distributing alerts described as "clunky." Participant H offered:

> Regardless of how quickly I am engaged or following…you know the preparation of a
>
> message, for example, scenarios evolve and they're fluid and they change based on

information you have available, based on, you know, the ability to obtain that information

and incorporate it into your decision-making models. So I think that that is

something…not completely understood outside of the police agency.

Participant P spoke about considerations for relying on other agencies if an alert were

required. They inquired about an evaluation of alert training available provincially, so that it met

the needs of police and the response received was that dedicated police training can't occur due

to the required national rules.

Within police services, the methods and protocols for emergency alerting processes

varied. One participant advised their internal alerting process can take anywhere from 15 to 20

minutes and up to 30 minutes depending on, "…the amount of information, accuracy of

information and verification checks and balances…" Interviewees noted the challenge,

depending on the circumstance, of having a maximum of 900 characters combined available for

an alert broadcast message and a maximum 600 for an alert wireless message. For the 600-

character message, this maximum limit must incorporate all languages the alert is distributed in.

For approval process, one participant noted they hold a supervisory role and would be in

a position to have an alert distributed via their provincial EMO. Others noted their Critical

Incident Commander was responsible for approving an emergency alert prior to distributing it

via EMO's or another police service. Some interviewees noted their in-house Real-Time

Operations Centre monitor daily operations at their respective police service and would

undertake the role of preparing an emergency alert, working through various approval processes

to have the alert distributed. Not every police organization has a Real-Time Operations Centre

however, and alerting is therefore assigned to other roles or units, such as the media relations

team.

Participant K noted that the decision to distribute an alert can be "agonizing" and there can be resistance to doing so, given that it may create mass panic, businesses will close, and schools will be evacuated. Event certainty, de-conflicting of information, and suspect containment were noted by other participants as additional factors, beyond the need for event severity and urgency. Participant H commented,

> At a time I have determined that we have not contained the threat of imminent danger and there is an active criminal threat in the community that is not contained and could cause harm, I'm moving forward [with an alert], but in terms of issuing the alert and [simply] informing the community population isn't necessarily the factor that will move the dial."

Participant P was clear that their police service would not distribute an emergency alert for every situation involving a gun or knife, "Now, the, the clincher on that one is, is that happens a lot still, but we have to decide if now alerting the public is gonna help [the situation]." They further noted imminent grievous bodily harm or death may influence alert decision making. Participant J also noted their criteria may not meet the requirement for a broadcast-immediate alert, "…so I think it's always about that immediate harm to the public, who's at risk, other than the people that have chosen to put themselves in that situation."

Training insight provided me with a perspective on how police services prepare for the potential use of an emergency alert during an urgent threat situation. One participant shared there are seven people trained within their service to distribute an alert directly. Another discussed their supervisors were trained in the alerting process and policy exists to guide their actions or decision making. This individual noted that alerting is another thing on "the top 10 of people's checklists" as part of unfolding event response. One police service ran emergency alerting quarterly training on top of discussion-based tabletop exercises. They noted that the inclusion of

alerting education was a huge learning curve, "That education piece has become much more important for us to be able to make sure that our officers actually know what their authorities are when they can issue an alert and what types of alerts they can be issued for" (Participant F).

The CACP Emergency Alerting Subcommittee chair stated that across police services, training and training consistency is the "biggest gap," particularly about training offered by EMOs. They shared, "Not everyone even receives training, let alone does everyone actually have access to the alert system itself." Participant H remarked on the "living, breathing" approach to public alerting and experience brought to a public alerting situation, "…I certainly wouldn't want, you know, somebody to walk in to a police service as a new member and be asked to engage in a public alerting scenario."

Of note, the CACP Emergency Alerting Subcommittee was in the process of creating an emergency alerting guide to be shared with all Canadian law enforcement. The chair said the guide would provide insight into all alert types sent via the NPAS, definitions and criteria for each, details on NAAD system technology, processes for public alerting across the country and crucial message content insight, "…like what must go in an alert or what should not go in an alert and some text to speech capabilities, best practises, as well as actual training and exercise materials." The Subcommittee has advocated for a broadcast-immediate dangerous person alert available for police use, in addition to civil emergencies, AMBER Alerts and terrorism-related emergencies.

Participant J explained,

…there's always that dilemma of how much needs to be shared and how much needs to be intrusive, versus how much needs to be available and under what platform and under what level of intrusion, but there is a need to keep our public informed…

On the mandatory nature of the NPAS, Participant H shared, "I do not think anything tops the alert system."

**Survey**

*Data Analysis Procedures*

IBM SPSS and Microsoft Excel were used to assist in my analysis of survey data. Leger sent the survey results, which I imported into SPSS and added labels reflecting the survey questions. Analysis of survey responses included examining the data and reporting on the results. I sought responses for all survey questions, except for a general commentary or open-ended question at the conclusion. I completed descriptive analysis for all questions, followed by SPSS inferential analysis based on RQ2: what forms public awareness, trust and expectations regarding police communication during urgent threat situations? Outcomes of *t*-tests and analysis of variance (ANOVA) compared groups for inferential analysis. Categorical data were calculated and reported as counts, percentages, or proportions, while continuous data were calculated and reported as averages, ranges or standard deviations.

Concluding open-ended data gave me insight into public commentary and opinions about police use of emergency alerts. The data was opinion-based and reflected each respondent's subjective experience. I conducted Google searches to verify the legitimacy of any policing examples referenced by respondents, but in some instances, no additional information was found on traditional news websites. RQ2 guided the data analysis and reflected the following themes: public awareness, trust and expectations.

**Survey Results**

*Descriptive Data Analysis*

I conducted quantitative survey data analysis following the steps adapted from Creswell and Creswell (2022), in addition to general comment review and grouping. I made responses mandatory for all questions, except for open-ended data inquiries. The survey questionnaire is located in Appendix B and descriptive data are in Table 1.

Leger sent 1,001 LEO panelists invitations to consider participating in the survey – Leger's overestimation to ensure receipt of an adequate sample. 486 (*n*) people met the study's 19-65 year-old age requirement in accordance with the ethics clearance granted, agreed to participate, and their responses are included in the analysis. Represented age groups included 66 participants aged 19-25 (13.6%), 96 participants aged 26-35 (19.8%), 102 participants aged 36-45 (21%), 120 participants aged 46-54 (24.7%) and 102 participants aged 55-65 (21%). 239 respondents identified as men (49.2%), 241 respondents identified as women (49.6%) and one person each identified as the following: genderfluid, gender queer and transgender male.

Of the 486 survey respondents, 66 lived in British Columbia (13.6%), 47 live in Alberta (9.7%), 13 lived in Saskatchewan (2.7%), 22 live in Manitoba (4.5%), 211 lived in Ontario (43.4%), 95 lived in Quebec (19.6%), 12 lived in New Brunswick (2.5%), eight lived in Nova Scotia (1.7%), three lived in Prince Edward Island (0.6%) and none lived in the Northwest Territories, Yukon or Nunavut.

In response to inquiry regarding where the respondents live in Canada, four lived in an Indigenous community (0.8%), 38 lived in a rural or remote area including communities with a population of less than 1,000 (7.8%), 86 lived in a community with a population between 1,000 and 30,000 (17.7%), 62 lived in a community with a population between 30,000 and 99,999

(12.7%), 115 lived in a community with a population between 100,000 and 499,999 (23.7%) and 181 lived in a community with a population over 500,000 (37.2%).

As this study emphasizes the police emergency alerting approach, a survey question asked for self-identification of police service employment. 15 participants responded yes, they are currently employed by a Canadian police service (3%), and the majority, or 471 (96.9%) people, responded that they are not currently employed by a Canadian police service.

Survey respondents were provided instructions prior to beginning factual content questions. This included a definition of "urgent threat to life situations" - urgent instances when police respond, such as an active shooter or dangerous person, where there is an urgent risk to public safety. This provided direction that the survey focus is not specific to AMBER Alerts. The survey inquired whether participants knew who their local police were. Nearly three quarters, or 72% ($n$ = 350), responded advising they know who their local police are. 20.8% ($n$ = 101) advised no, they do not know who their local police are and 7.2% ($n$ = 35) advised they are unsure who their local police are.

Respondents were asked how their local police tell them about urgent threats to their life, such as a dangerous person or an active shooter situation. They had unlimited response options to the six randomized answer options provided, in addition to an open-ended 'other' inquiry. Of the six answer options provided for how police tell respondents about urgent threats to their life, 236 participants (48.6%) learn via local news reporting, 216 participants (44.4%) learn via an emergency alert sent to their phone automatically, 163 participants (33.5%) learn via police service social media channels, 106 participants (21.8%) learn via a news release posted to their local police service's website and 16 participants (3.3%) learn via a subscription-based police

service app. 95 participant responses (19.6%) indicated they are not informed by their local police when there is an urgent threat to the public.

16 open-ended responses provided further insight into how participants are notified about urgent threats to their lives. Five responses indicated participants are unsure or do not know how their local police would tell them of urgent threats to their life. Facebook, X and YouTube are specifically named in addition to a general response of "social media." Three participants received notification via building announcements, condo management or other email. One person received automatic voice messages from their city, but it is unclear whether this is due to subscription-based tool registration. Two participants receive notification about urgent threats to life via applications (apps) and one person advised they do not know how they would be notified as "I have not had such a type of urgent situation."

Respondents provided insight into whether their local police service distributes emergency alerts to their cell phone when there is an urgent threat, with 220 participants (45.3%) who responded yes, 114 participants (23.5%) responded no and 146 participants (30.04%) responded they didn't know. Six participants (1.2%) reported not having a cell phone to receive a distributed emergency alert. When asked how respondents receive emergency alerts from their local police, more than half or 256 (52.7%) participants didn't know if their local police could send them an emergency alert, 194 (39.9%) participants responded they automatically receive emergency alerts from their local police and 27 (5.6%) participants responded they signed up to receive emergency alerts from their local police. Open-ended responses indicated three instances of participants who received alerts via their provincial alert system, one received alerts from the RCMP, two from social media and two from local media/media applications.

Participants expected their local police to inform them of urgent safety threats; however, the distance from the threat varied in the responses. 303 respondents (62.4%) expected to be notified when an urgent safety threat is 0-30 kilometers away from them, 105 respondents (21.6%) expected to be notified when an urgent safety threat is 30-60 kilometers away from them and 29 respondents (6%) expected to be notified when an urgent safety threat is 60-90 kilometers away from them. 24 respondents (4.9%) expected to be notified when an urgent safety threat is more than 90 kilometers away from them, and a further 25 respondents (5%) do not care to receive information about urgent threats to their life.

The survey inquired whether respondents trusted their local police to inform them when there was an urgent threat impacting public safety. Participants were instructed to indicate their level of agreement with this statement using a five-point Likert scale, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. 151 participants (31.1%) strongly agreed, the majority of respondents (n = 189, 38.9%) agreed, 102 (21%) were neutral, 38 (7.8%) disagreed and a further six (1.2%) strongly disagreed.

Respondents' expectations of police communication methods during an urgent threat situation are measured using a multiple-choice question. Participants were required to answer by selecting three choices from six randomized, predefined answers. Responses were not required to be prioritized based on personal importance. Generally, an automatic emergency alert sent to one's phone was chosen most overall and 398 (81.2%) of the 486 participants selected this as an expected communication method. Local news media reporting ranks second; 344 participants (70.8%) overall selected this as an expected communication method. Just over half, or 261 (53.7%), of participants overall ranked social media posts on their local police service's channels as the third-most expected communication method. Overall, 178 (36.6%) participants expected to

receive an alert via a subscription-based tool they signed up for, 147 (30.3%) expected to see a news release posted to their local police service's website, and just over a quarter ($n = 125$, 25.7%) expected to be notified via police door-to-door notification. These responses were ranked fourth, fifth and sixth, respectively. This survey question also contained the option to provide open-ended written feedback, generating insight from five participants. Two participants advised they didn't know or didn't care which tools their local police use to communicate during an unfolding threat situation; one participant expected an email notification, one participant expected to see a commotion or visible police presence, and one participant advised they do not expect their local police to communicate during an urgent event.

A Likert scale question concluded the formal survey, inquiring whether respondents' local police do a good job educating the public about emergency alerts and how alerts are used during urgent safety situations with answers ranging from 5 = Strongly Agree to 1 = Strongly Disagree. The largest group of 179 participants (36.8%) responded neutrally, neither agreeing nor disagreeing, 149 participants (30.7%) agreed, and 58 participants (11.9%) strongly agreed. A further 88 participants (18.1%) disagreed and 12 participants (2.5%) strongly disagreed that their local police do a good job educating the public about emergency alerting.

### *Inferential Data Analysis*

In examining the survey data from 486 participants, I addressed RQ2: What forms public awareness, trust and expectations regarding police communication during urgent threat situations? Specifically, I analyzed survey questions 11, 12 and 13 further to explore samples that were representative of the greater Canadian population (Appendix D).

**Q11: I trust that my local police will tell me when there is an urgent threat**

**impacting public safety.** I used a t-test to compare responses based on gender (men and women only due to sample size). However, the results of the t-test were not significant. A t-test of survey results indicated that both men (n = 239, M = 3.90, SD = 0.961) and women (n = 241, M = 3.94, SD = 0.966) respondents had similar levels of trust (Appendix D, Table 8).

Using four, one-way analysis of variance (ANOVA) tests, I examined respondents' age, province, where they live in Canada, and police awareness, comparing to survey question 11: I trust that my local police will tell me when there is an urgent threat impacting public safety.

Statistical analysis showed relatively consistent and high trust levels across the five respondent age groups (M = 3.91, SD = 0.968) for whether local police will tell them when there is an urgent threat impacting public safety (Appendix D, Table 4). The second-youngest 26-35 age group had the highest level of trust ($n$ = 96, M = 3.98, SD = 0.858), while the oldest 55-65 age group had the lowest level of trust ($n$ = 102, M = 3.83, SD = 1.025). However, the differences between the groups were not statistically significant.

Provincial-level trust (Appendix D, Table 6) was also fairly consistent across categories (total M = 3.91, SD = 0.968). Alberta respondents had the highest trust ($n$ = 48, M = 4.15, SD = 1.021), Nova Scotia had the second-highest trust (with a lower $n$ = 8, M = 4.13, SD = 1.126) and Newfoundland and Labrador had the third-highest trust (with a lower $n$ = 9, M = 4.11, SD = 0.928). Prince Edward Island had the least trust (with a lower $n$ = 3, M = 2.67, SD = 0.667) after Quebec ($n$ = 95, M = 3.80, SD = 1.058) and Ontario ($n$ = 211, M = 3.88, SD = 0.931), respectively. In examining where respondents live and community size (Appendix D, Table 10), responses were fairly consistent (total M = 3.91, SD = 0.968). Indigenous community respondents, had the highest trust (with a lower $n$ = 4, M = 4.25, SD = 1.5) and respondents who

lived in a rural or remote area, including communities with a population of less than 1,000, had

the least trust ($n = 38$, M $= 3.74$, SD $= 0.978$), followed by respondents who lived in a

community with a population between 30,000 and 99,999 ($n = 62$, M $= 3.81$, SD $= 0.902$). None

of the values examined were statistically significant (value $= 0.05$ or lower).

**Figure 1**

*Provincial Comparisons Q1 and Q6*



*Note.* Survey participants responded to Q6: I know who my local police are, by selecting "yes,"
"no," or "unsure." Figure 1 breaks down these responses by province.

An ANOVA test was performed to determine whether respondents' knowledge about the

local police influenced their level of trust. An ANOVA test was significant (F $= 7.615$, df $= 2$, p

$= <.001$), indicating that respondents knew who their local police were ($n = 350$, M $= 4.01$, SD $=$

$0.897$), and had increased trust that their local police would tell them when there was an urgent

threat to their safety versus those who did not know who their local police were ($n = 101$, M $=$

$3.59$, SD $= 1.079$) (Tables 12, 13 in Appendix D). With this in mind, most regions of Canada had

similar percentages of people familiar with who their local police were (Appendix D, Table 14), with the West Coast being the lowest ($n = 46$, 69.70%) and the Prairie Provinces being the highest ($n = 60$, 73.17%) (Table 10). More than a quarter of respondents in all regions of Canada either did not know or were unsure who their local police were, with the Prairie Provinces at 26.83% ($n = 22$), Central Provinces at 27.78% ($n = 85$), Atlantic Provinces at 28.13% ($n = 9$) and the West Coast at 30.30% ($n = 20$). Prairie Province numbers were lowest in Saskatchewan, where 53.85% of people ($n = 7$) knew who their local police were, and 46.15% of people did not know ($n = 6$). Prince Edward Island had more people who did not know who their local police were ($n = 2$, 66.67%) than people who did ($n = 1$, 33.33%).

**Q12: Top three tools you expect your local police to use to communicate with the public when an urgent threat situation is unfolding.** The public's expectation of tools and tactics used by the police to communicate when an urgent threat situation is unfolding was examined further using gender comparisons (men and women only due to sample size), age and province. Respondents were asked to select their top three of six choices. Both men and women (Appendix D, Table 15) ranked automatic emergency alerts, local news media reporting and social media posts on their local police service's channels first, second and third priority, respectively, followed by subscription-based emergency alerts, news releases posted to the local police service website and door-to-door notification by police. While half of the categories ranked similarly by both women and men, a higher number of women ($n = 208$, 86.31%) selected automatic emergency alerts as an expected communication tool, than men ($n = 185$, 77.41%). Alternatively, a higher number of men ($n = 105$, 43.93%) selected subscription-based emergency alerting as an expected communication tool, than women ($n = 73$, 30.29%). When I examined responses to

social media as a communication tactic, 58.09% of women (*n* = 140) expected this

communication tool to be used, versus 48.95% of men (*n* = 117).

**Figure 2**

*Age Comparisons Q3 and Q12*



*Note*. Figure 2 shows survey participant responses to Q12: Select the top three tools you expect
your local police to use to communicate with the public when an urgent threat situation is
unfolding by age. Survey response options were randomized. Seven response options were
provided; option "other" is excluded. Communication tool names are consolidated for space.

Age groups collectively prioritized police communication tactics with the same standing as

women and men (Appendix D, Table 16). 26-35 (*n* = 96) and 36-45 (*n* = 102) year olds ranked

highest at 83.33% expecting automatic emergency alerts to be used as a communication tool by

police. 46-54 (*n* = 120, 82.50%) and 55-65 (*n* = 102, 82.35%) year olds were next highest for

automatic emergency alerts, and 19-25 year olds (*n* = 66, 75.76%) had the lowest, yet still quite

high, response percentage. 81.37% of 55-65 ($n$ = 102) year olds ranked local news media reporting of respondents as an expected communication tool, and 60.42% of 26-35 ($n$ = 58) year olds least expected this as a communication method. Police social media channels were selected as a communication tool similarly across age groups. 58.33% of respondents aged 26-35 ($n$ = 56) selected this most and 45.10% of 55-65 ($n$ = 46) year olds selected this least of all age groups. Subscription-based emergency alerting was most expected by 19-25 ($n$ = 26, 39.39%) age respondents and least expected by 36-45 ($n$ = 33, 32.35%) year olds, although all age categories were within similar response percentages. News releases posted to police service websites are least expected as a communication tool by the 55-65 ($n$ = 24, 23.53%) age category and conversely expected most by 39.39% of respondents age 19-25 ($n$ = 26). Just over a quarter ($n$ = 125, 25.72%) of overall survey respondents expected door to door or in-person notification by police as a communication method, with a range in responses from 29.41% of 55-65 ($n$ = 30) year olds to 22.73% of 19-25 (15) year olds.

Responses from a provincial perspective prioritize police urgent threat communication tactics with the same standing outcomes as gender and age (Appendix D, Table 18). For this analysis, I examined response rankings by region, including the West Coast (British Columbia), Prairie Provinces (Alberta, Saskatchewan and Manitoba), Central Provinces (Ontario and Quebec) and Atlantic Provinces (New Brunswick, Prince Edward Island, Nova Scotia and Newfoundland and Labrador).

**Figure 3**

*Regional Comparisons for Q3 and Q12*



*Note.* Figure 3 shows survey participant responses to Q12: Select the top three tools you expect your local police to use to communicate with the public when an urgent threat situation is unfolding and region of Canada. Survey response options were randomized. Seven response options were provided; option "other" is excluded. Communication tool names are consolidated for space.

The Prairie (*n* = 76, 92.68%) and Atlantic (*n* = 29, 90.63%) Provinces expected police to communicate using automatic emergency alerts most often, and both are locations where mass casualties have occurred within the past five years (Portapique, Nova Scotia, 2020, and James Smith Cree Nation and Weldon, Saskatchewan, 2022, respectively). The West Coast (*n* = 59, 89.39%) and Central (*n* = 234, 76.47%) Provinces followed. Local news media reporting was most expected by Atlantic Provinces (*n* = 24, 75%), followed closely by the West Coast (*n* = 49, 74.24%) and then Central (*n* = 214, 69.93%) and Prairie (*n* = 57, 69.51%) Provinces.

Police social media communication was expected most by Atlantic Provinces ($n = 22$, 68.75%), and half of both Central ($n = 172$, 56.21%) and West Coast ($n = 34$, 51.52%) Provinces ranked next, followed lastly by Prairie ($n = 33$, 40.24%) Provinces. Subscription-based emergency alerts as a communication tool was selected by Prairie ($n = 33$, 40.24%), Central ($n = 111$, 36.27%), West Coast ($n = 23$, 34.85%) and Central ($n = 111$, 36.27%) Provinces respectively. Lastly, door to door communication by police during an urgent safety threat situation was expected by just over a quarter (25.72%) of respondents overall, selected by Central ($n = 83$, 27.12%), West Coast ($n = 17$, 25.76%), Prairie ($n = 20$, 24.38%) and Atlantic ($n = 5$, 15.63%) Province participants.

**Q13: My local police do a good job educating the public about emergency alerts and how they are used during urgent safety situations.** I conducted a *t*-test to examine the relationship between respondent gender (men and women only due to sample size). However, the results of the *t*-test were not significant. I did not find any significant differences between the two genders.

I also conducted three one-way ANOVAs to investigate the differences in responses on survey question 13 based on age, province, and community size. Survey data analysis (Appendix D, Table 4) showed fairly consistent responses across the five respondent age groups (total M = 3.31, SD = 0.983) for whether respondents specified that their local police do a good job educating the public about emergency alerts and how they are used during urgent safety situations. The 26-35 age group agreed most with this statement ($n = 96$, M = 2.55, SD = 0.993) while the 55-65 age group ($n = 102$, M = 2.79, SD = 0.978) agreed least. However, these differences were not statistically significant.

I conducted a one-way ANOVA to compare the effect of respondents from different provinces on their perception of police effectiveness in educating the public about emergency alerts (Appendix D, Table 6). The province where respondents lived had a moderately significant effect on whether participants agreed their local police are effective in communicating with the public about emergency alerting at the $p<.05$ level for the three conditions [$F(9, 476) = 2.166$, $p = 0.023$]. Despite this, Post-hoc Tukey test comparisons do not identify statistically significant pairs amongst provinces.

**Figure 4**

*Provincial Comparisons for Q1 and Q13*



*Note.* Figure 4 shows survey participant responses to Q13: My local police do a good job educating the public about emergency alerts and how they are used during urgent safety situations. Response options were on a Likert scale from strongly disagree to strongly agree.

The Atlantic Canada represents the top three notable average rankings overall, with Newfoundland and Labrador ($n = 9$, M = 4.00, SD = 1.000) agreeing most with police doing a good job educating the public about emergency alerts, followed by New Brunswick ($n = 12$, M = 3.75, SD = 1.215) and Nova Scotia ($n = 8$, M = 3.63, SD = 1.188). The Prairie Provinces ranked next including Manitoba ($n = 22$, M = 3.59, SD = 0.796), Alberta ($n = 47$, M = 3.55, SD = 1.059) and then Saskatchewan ($n = 13$, M = 3.54, SD = 0.776). British Columbia ($n = 66$, M = 3.26, SD = 0.997) and Ontario ($n = 211$, M = 3.26, SD = 0.921) shared seventh place, followed by Quebec ($n = 95$, M = 3.16, SD = 1.014). Prince Edward Island ($n = 3$, M = 2.33, SD = 1.528) averaged the lowest overall in provincial comparison.

I examined where respondents live in Canada and community size (Appendix D, Table 10), and their response to question 13. The results of the ANOVA tests were not significant, responses were reasonably consistent (total M = 3.31, SD = 0.983). Indigenous community respondents, while low in respondent numbers, agreed most that local police did a good job educating the public about emergency alerts ($n = 4$, M = 3.75, SD = 1.258), followed by respondents who lived in a community with a population between 1,000 and 30,000 ($n = 86$, M = 3.38, SD = 1.008). Respondents who lived in a community with a population between 30,000 and 99,999 ($n = 62$, M = 3.24, SD = 0.862) least agreed. A separate $t$-test results indicated that men ($n = 239$, M = 3.36, SD = 1.032) think their local police do a good job educating the public about emergency alerts more so than women ($n = 241$, M = 3.29 SD = 0.926) (Appendix D, Table 9).

I conducted a one-way ANOVA test to determine if knowing who their local police were had a significant effect on whether participants agreed their local police would communicate with them during urgent safety situations (Q13). The results of the test were significant (F = 5.444, df

= 2, p = .005 level) (Appendix D, Table 19). In post-hoc Tukey test comparisons (Appendix D,

Table 20), multiple comparisons indicated people who responded 'yes' to knowing who their

local police are ($n$ = 350, M = 3.41, SD = .979) rated their trust in local police to advise when

there is an urgent safety situation higher than those who responded 'no' ($n$ = 101, M = 3.08, SD

= 0.966).

A Pearson correlation coefficient was calculated to evaluate the relationship between the

following variables: whether respondents trust their local police to tell them when there is an

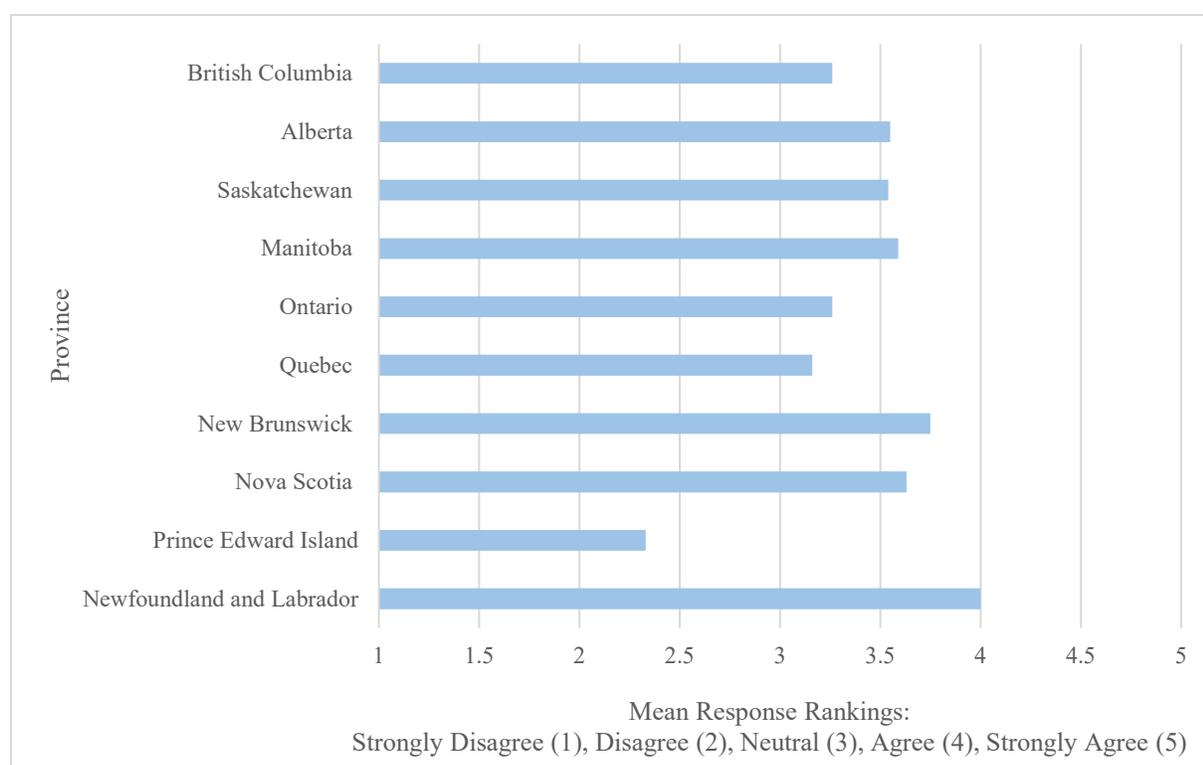urgent threat impacting public safety, and the police do a good job educating the public about

emergency alerts and how they are used during urgent safety situations. The results indicated a

significant and strong, positive relationship between both variables, r([$N$( 486)-2]) = .600, p =

<.001, with a less than 0.1% chance that this relationship is random in nature. This can be

interpreted as public trust in police communication during urgent safety situations is closely

linked to public perception of how well their local police educate them about emergency alerts

and how they are used. People who trust the police will inform them of urgent safety threats also

believe the police do a good job educating the public about emergency alerting and their use

during urgent safety threat situations.

### *Open-ended Survey Data Analysis*

There were 129 responses to the final voluntary, open-ended survey question: Do you have

any other comments or opinions about police use of emergency alerts you would like to share?

Utilizing research question two, I grouped the comments into three separate themes: public

awareness, public trust, and public expectations (Appendix E). Of the 129 comments provided,

20 were categorized under "public awareness," 23 under "public trust" and 20 under "public

expectations." Just over half, 66 comments, were categorized as "other." "Other" comments were

either incomprehensible or irrelevant. For readability, typos were corrected in the following commentary, but overall participant language is preserved. Despite the imminent safety threat definition provided, "AMBER Alerts" were specifically cited by respondents 12 times.

**Open-Ended Survey Data: Public Awareness.** One respondent advises, "I am not sure if we will receive emergency alerts, but would like to know if it's possible, if necessary," while another said, "I don't think I've ever personally experienced an emergency alert, so I'm not sure if they have the ability to do this or not. But I can see it being useful." One person remarked they "…receive alerts, but unclear if they are from the province or police," and another noted, "I probably should sign up to get notifications of urgent threats."

One commenter said that they receive thorough boil water and flooding alerts from their county, but have "…never seen an emergency alert on social media or the police website so I do not know if they're actually issuing them or not." One comment reflected, "It would be good if the municipality can inform the residents on the services available to obtain alerts and notifications." Another respondent shared that they have only received test alerts on their cell phone.

"I typically do not hear about police events or alerts unless I stumble across it on social media," shared one commenter and another said, "I think [alerts] are very useful and I'd like more information about how community police plan to use it." Another respondent advised, "Your survey has made me aware that I'm not entirely sure of the distinction between 'local' police and broader emergency alerts." Finally, one individual revealed, "Makes me realize I do not know much about this. Emergency situations are rare here. Never thought about how the police would reach us."

**Open-Ended Survey Data: Public Trust.** Police visibility is commented on by several people who advised they "Do not see any police," "Local police understaffed. Limited help available to public," "Not enough police to get the message out fast enough," "We have RCMP in my community and they are not very visible." "The police do not seem to care about regular Canadian citizens," said one respondent while another individual shared, "I do not really trust the police, but expect that they should be able to communicate a life-threatening alarm."

Specific investigations or events are also mentioned by survey participants including the Lac-Mégantic rail disaster (2013), "…the police do not knock doors to doors," and Nova Scotia mass casualty (2020), "The mass shooting in Nova Scotia is a lesson in the importance of emergency alerts. Lives could have been saved if the police/RCMP had acted sooner to communicate to the public."

AMBER Alerts are commented on, including police "…have been doing a good job with AMBER Alert." "They've gotta stop with the AMBER Alerts," said one person, "I do not need a nuclear siren going off on my phone for a missing child 400km away. A simply quiet notification would be fine, reserving the loud alerts for actual life-threatening situations." Another commenter shared, "The only [alerts] I ever get are AMBER Alerts and they're pretty much never relevant to me (they involve situations that happen miles from where I live)." One person shared that the 'AMBER Alert system' is abused, "Being informed that somebody over 1,000 miles away is insane and has come to the point we are at now, many people ignore AMBER Alerts on their phones." One additional general comment questions is, "Why am I getting notifications for things over 150km away?"

Comments also discussed that the police "Do a fine job. I'd notice with all the cop cars around if there was a situation," "They do excellent job of keep[ing] our community safe" and

"I'm thankful to have a local police when something very urgent happen[s]." One individual said they are, "Satisfied with how alert system works presently."

  **Open-Ended Survey Data: Public Expectations.** With regards to alert dissemination timing, one comment noted, "Fast dissemination was very crucial in every emergenc[y] and we need to speed up our alert system with reliability" and another said, "I do not believe they are sent in a timely manner." One respondent reflected, "They need to be faster at sending out the alerts. Even when information is unclear, they must act quickly in the name of public safety. I would rather be alert because of misinformation than unalert because they didn't have the exact details."

  A respondent questioned whether they have received all alerts intended for their area, "I suspect that I receive only some of the emergency alerts that are intended to reach people in my area. My husband and I live together and have different cell phone carriers, and he receives more automatic emergency alerts to his phone than I do." One commenter compared two police agencies in their province, advising the first agency "are a great example of using Emergency Alerts. I wish my local police (…) would copy them."

  One person commented, "Alerts are useless. Police should respond quicker to emergencies and do their job instead of sending AMBER Alerts or other such notifications." "More [alerts] would be good," one response read, "Especially if they reveal distinguishing characteristics rather than just A Man." The audible noise accompanying alerts is mentioned by two individuals who advised, "The emergency sound pushed to the phone is much too loud," and "They need to lower the volume of the alerts before they give someone a heart attack."

"I think it would be difficult for police in a densely populated area to reach those of us who do not have cell phones, especially as they are also busy dealing with the situation," said one commenter who expanded, "I didn't know it was possible to sign up for emergency alerts, or what form these take; then again, I likely wouldn't see an email until after the event anyway, and I can't physically pick up the phone. But I live in a secured-entry high-rise, so I hope they would come door-to-door if there was a direct threat to residents." A respondent stated alerting "…can be better," and one individual shared it is, "Important to inform [the] public." One commenter indicated, "I think my local police should do a better job of informing the public in my area of threats to life."

**Chapter Four: Discussion**

Perhaps you've experienced it - the deafening, insistent and distinct emergency alert noise signalling an unfolding public safety risk. Whether it warns of a natural disaster, an abducted child, a dangerous person or other critical events, an emergency alert has the authority to capture your immediate attention. Yet little was known about what happens behind the scenes with police alerting decision makers or what the public's opinions are about imminent safety threat communication.

There are many ways to interpret the world, evident in the scope and variety of responses to this mixed-methods research on communicating imminent safety threats and understanding the use of emergency alerting by Canadian police. This study, in many ways, is an investigation of reality: what police services have and continue to experience when communicating using emergency alerts, as well as the public's experience, perception and expectations regarding notification of imminent safety threats. I selected mixed methods due to its contribution to real-world public safety instances, focusing on usefulness, applicability and effectiveness. Within this context, the study sought to answer two research questions: to explore and learn how police services in Canada navigate challenges, utilize tools, and meet public expectations when communicating via emergency alert(s) during imminent safety threats (RQ1) and to glean a perspective on what forms public awareness, trust, and expectations regarding police communication methods during urgent threat situations in Canada (RQ2). To address these inquiries, I studied two datasets: interviews I conducted with eight Canadian police service employees directly involved in public alerting, which informed RQ1, and nationwide survey responses ($n = 486$) from members of the public aged 19-65, which informed RQ2.

Analyzing interviews, I found that Canadian police preparedness or investigative experience affects the approach to emergency alerting. Alert risks and public safety responsibilities must be weighed during an imminent safety situation. Alerting is influenced by external factors beyond the scope of the police, and emergency alerting as a communication tool is impacted by each individual agency's approach to and knowledge of alerting. Analyzing survey results, I discovered lower public awareness of police emergency alerting practices exists; however, there is strong public trust in local police to warn of an urgent threat that could impact their safety. I deem this insight important given that automatic emergency alerts issued to the public were selected most frequently as an expected communication tool during an urgent threat situation. Furthermore, I learned that respondents who trust their local police to inform them of safety threats also believe police do a good job educating the public about emergency alerting.

**Policing and Public Perspective**

My impression is that my employment experience, as discussed in *Role of the Researcher*, and the anonymous nature of this study, significantly contributed to the resulting open and honest conversations I experienced with police representatives. As Jackson and Bradford (2018) advise, "clear, open and honest" (p. 8) communication is an expectation of the police, and this study is an opportunity to learn directly from law enforcement subject matter experts about how an essential communication tool is used during urgent situations. My perception, sans evidence, is that some of the 21 police services I attempted to recruit for this study did not wish to participate due to the intense criticisms police faced in the aftermath of other Canadian mass casualty events. With a cloak of anonymity, vital experience and perspective were gleaned for this study from interview participants to give a unique context to current police-alerting realities.

Public sentiment towards and trust in police is a fickle thing, which I assert can be influenced by personal experience and daily occurrences. As Schaap and Scheepers (2014) noted, "…police are considered to be the most visible representation of the authority of the state" and public trust in the police ever-important with "Trust in the police increase[ing] citizens' compliance with the rule of law, is related to the willingness to cooperate with the police and report crime…[and etcetera]" (p. 83). Behavioural compliance with police can influence public response, as noted by Mileti and Sorensen (1990), which in-turn can have an impact on whether public alerts are adhered to. Additionally, the public's definition of 'police' can vary (Jackson & Bradford, 2018). I argue this variance is further impacted by alert distribution boundaries, which can extend beyond the known jurisdiction of one's 'local police.' With these points in mind, I conducted a survey yielding new data to help inform police communication practices during urgent safety threat situations.

These study findings offer an evidence-based approach to law enforcement emergency alerting. Wholly, the findings are concluded with three recommendations primarily directed at police services within Canada and beyond. Police services have the ability to action and implement change organizationally, all the while being nimble to evolving circumstances and public perception and reaction. The opportunity exists for police to examine their emergency alerting practices and procedures, highlight potential process or knowledge gaps, advocate for alerting change and advancement and ensure their service is adequately prepared to act and communicate when the next imminent safety event happens.

**Recommendation: Public Education**

***Foster public familiarity in police emergency alerting via education campaigns***

I argue that Canadians' public awareness of the NPAS and its capabilities has increased. I relate this to multiple Canadian mass casualties (Portapique, 2020, and James Smith Cree Nation and Weldon, 2022) and associated inquiry/inquests, as well as other investigations communicated via emergency alert, in addition to increased public and news narrative about police emergency alerting (Cave, 2025; CBC News, 2020; Hill, 2020; Lee, 2024; Phillips, 2025; Rhodes, 2022; Ryan, 2022).

This study finds that while police services must undertake an individual approach to emergency alerting, external influence has a significant impact overall on emergency alerting, often outside the realm of police control. As one interviewee noted, "Public expectation shapes how we do business…" The public's lack of understanding of police assessment and urgency considerations led to frustrations among multiple participants. Notably, Participant F commented on the need for public awareness of emergency alerting practices.

As this study's survey findings indicate, public trust in police communication tactics is linked to public perception of police education about emergency alerting. Given this, public education on emergency alerting is absolutely necessary to help bridge gaps between the police and the public. As Lindell and Perry (2004) state, actions taken by the public can impact disaster response. Findings from interviews indicate police must make critical decisions very quickly in these instances, often without fully knowing the scope of what is occurring. This strategy and risk may not be fully understood by the public, as the complexities of an investigation are often unknown, either to protect the integrity of police response and decision making or potential court proceedings.

There are consequences to emergency alerting and alert decision making that may not be appreciated in the public sphere, nor explored substantially. This is evident in candid conversations I had with police interviewees who shared that the complexities of public alerting 'keeps them up at night.' My intention with the interviews was to pull back the curtain on police-initiated public alert decision making. Bean and Grevstad (2022) highlighted the need for further public education about emergency alerting. An opportunity exists to help advance real or perceived public knowledge and expectation of police alerting.

The study's findings identify target audiences that police services can focus on to strengthen public response to police emergency alerting education campaigns. While all provinces could benefit, targeted communication campaigns may be particularly valuable in Prince Edward Island, Quebec, Ontario, and British Columbia, which rank lowest overall in response to inquiries about police education about emergency alerts. An emphasis on focused emergency alert education by police serving communities with a population between 30,000 and 99,999 is also recommended, given that this respondent group least agreed that local police are doing a good job in this area.

I recommend that police services engage with news partners and the general public to educate them on important alerting decision making and other communication methods used. Information sharing does not have to be inclusive of CIC processes or RTOC procedures, but can give insight into what decisions police must make and the positive and negative weight of public alerting on an urgent safety event or investigation. Preparedness messaging will aid in increasing public awareness before an imminent safety threat occurs. It may also help reduce milling (Sutton et al., 2017; Sutton, 2024; Lindell & Perry, 2012) if the public understands the level of

severity for when police distribute an alert. Police communication strategists can use this study's data to help inform target audience personas, tactics, platforms and success measures.

**Recommendation: Build Trust**

*Proactively incentivize police communication tactics*

An important reminder is that once an urgent public safety threat has happened, the time for public education or preparedness messaging has already passed. Proactively incentivizing these communication tools as key information drivers during an urgent safety threat situation means the public will know and come to rely on them as a trusted source of information in advance of an urgent event. Response messaging will be more successful as a result.

The survey indicates that respondents who know who their police are tend to trust that the police will communicate during urgent threat situations consistently. Based on this, a prospective public awareness campaign intended to educate the public on who their local police are can help foster familiarity. At a minimum, this campaign could aim to educate those survey respondents who either do not know or are unsure who their local police are. Most provinces could benefit from a "who are my local police?" education initiative, especially in Prince Edward Island, Saskatchewan, Nova Scotia, and Quebec.

The benefits of this education exercise extend beyond the scope of public alerting in terms of future transparency and reporting of crime data, awareness of other public safety risks and generating potential situation-specific public compliance or investigative support. Police partnerships with other agencies to educate the public about the alerting approach can help expand trust, particularly given that Jackson and Bradford (2018) note that many different sources can inform knowledge of the police.

Jackson and Bradford (2018) highlighted that police rely on and require public assistance to support ongoing investigations, and without public trust in the police, cooperation is unlikely. Building public trust in the police is essential to support urgent safety threat investigations where tips about unfolding events and suspect whereabouts may help conclude a dangerous situation quickly. The public and media also need to be aware, however, that details included in a public alert could implicate a future criminal investigation or court process, as noted by Participant H.

"Clear, open and honest" communication is expected by the police (Jackson & Bradford, 2019, p. 8). Protective action is linked with interpreting the content of an alert message as a personal threat (Kim et al., 2019, p. 8). Using their own capabilities, police services have implemented other means of communicating with the public, including using local news or social media during urgent threat situations. Building trust in different police communication channels is necessary to help mitigate public risk, particularly given concerns around NPAS continuity beyond 2026. This is dually noted by a departed CRTC manager who said that previously acceptable NPAS deficiencies and gaps need to be addressed now (CRTC, 2022, p. 16).

### *The public must obtain information from somewhere*

An emergency-warned, "information hungry" public (Mileti & Sorenson, 1990, p. 55) needs to obtain details from somewhere. This study found a strong, positive correlation between public trust in the police to communicate when there is an urgent threat impacting public safety and whether local police do a good job educating the public about emergency alerts and how they are used during urgent safety situations. Findings indicate police-driven public education efforts about emergency alerts is strongly associated with increased trust in the police to communicate with the public during imminent safety situations. This is important given that 19.6% of survey respondents ($n = 95$) indicate they are not informed by their local police when

there is an urgent threat to the public. Also, 45.3% of respondents overall ($n = 220$) say their local police distribute automatic emergency alerts to their cell phone when there is an urgent threat, yet more than half ($n = 256$, 52.7%) do not actually know if their local police can *send* them an emergency alert.

Milling (Sutton et al., 2017; Sutton, 2024; Lindell & Perry, 2012) and trust implications increase public compliance and cooperation (Schaap & Scheepers, 2014). This study's data identifies an opportunity for police services to clearly articulate all their localized emergency alerting communication tactics as part of public education and preparedness messaging efforts. This education-based approach may positively impact public trust in police emergency preparedness and share insights into the realities of complex investigations, debunking misinformation or informing perception. This can be further expanded by engaging local news media reporting and driving awareness and interest to police-maintained social media channels (ranked two and three by the public in this study's publicly expected communication tactics, respectively). A further opportunity may be to share whether or not police can entertain door-to-door notification during an urgent threat situation, as expected by just over a quarter ($n = 125$, 25.7%) of respondents.

### *Expedite alerting protocols or risk the public seeking alternate sources of information*

The uniqueness of an alert and warning is noted by Sellnow and Seeger (2021), with a warning happening when a threat is confirmed (p. 36). Participants F, J and K highlight the importance of having accurate information publicly available, which means a situation must be confirmed before an alert is distributed. Without confirmation, police risk public compliance in the future. Failure to produce effective, timely warning messages could also yield life-threatening consequences (Wood et al., 2017), which police must deliberate, particularly when it

is likely the alert will also warn any suspects. This is also important to note, given that both police participants and survey respondents indicate timeliness as a key factor in emergency alerting effectiveness. Police participants indicated that the length of time to distribute an emergency alert to the public can vary, whether this is due to the evolving nature of the event or navigating external agencies to do so. One survey respondent advised they will "notice" an increased police presence, which may occur before a police emergency alert is distributed. In the absence of an emergency alert, the public will seek information elsewhere.

The public must determine whether or not information available in the public realm, such as on social media, is relevant or not. Police participants shared the importance of having a presence on social media platforms to extend their communication reach during an unfolding event. This is wise, considering survey respondents ranked police social media channels as the third-most important communication tool. If police do not have a dedicated, consistent voice on these platforms, external commentary may derail or obscure information available to the public. This is why, even for smaller police services, it is important to have someone dedicated to external communication during imminent safety situations.

The CRTC has twice (2014 and 2018) had to mandate Canadian broadcasters, cable and satellite companies to issue immediate emergency alerts to the public (Public Safety Canada, 2020 & CRTC, 2017). The advent of the Online News Act (Meta, 2023) highlights the need for other means of communicating with the public during urgent safety situations. Police and legacy media must work together, particularly given that the public will seek information elsewhere to help inform their decision making (Lindell & Perry, 2012). Local media reporting was also ranked second by this study's survey respondents for the top tools they expect their local police to use to communicate during urgent situations. News media must also understand it takes time

for police to prioritize looking into external commentary, rumours or information to deem it credible or not. To garner extended reach, it may be beneficial for police to educate local government or partners on their alerting capabilities and create a joint public education and awareness campaign, as recommended in the survey response.

**Recommendation: Alerting Training and Practice**

***Train from the top down and bottom up often***

The CACP Emergency Alerting Subcommittee chair highlighted training as the "biggest gap" when it comes to using the NPAS. This must be rectified in order to unify the public alerting approach across Canadian police services. This is echoed by Inglis (2021), whose research determined that disparities in formalized alert training speak to overall trends in "inadequate support…for the effective management of crisis information dissemination in Canada" (p. 55). Several interview participants noted the "clunky" nature of the NAAD system and how this impacts even "good" localized police alert processes. Some noted the general lack of public or media awareness of alert character limits, which, in some instances, must incorporate multiple languages. Emergency alerting should, as one participant noted, be on "the top 10 of people's checklists" as part of unfolding operational police response.

Based on the research findings, I recommend that police prioritize emergency alerting and NPAS education within their service, training everyone from senior decision makers to front-line responding officers who may be the first to identify the need for an alert. Dedicated policies and procedures should guide a consistent police approach. Additionally, police should incorporate alerting into investigative tabletops and exercises and fully embrace embedding strategic communications or public relations personnel in operational response. This is absolutely necessary to meet or exceed the public's expectations for communicating across multiple

expected channels when an active incident unfolds. A proactive approach to regular, internal education and practice can identify risks and gaps - do not wait for unfolding events when scrutiny is high and the time to learn is short.

***Even good practices will be challenged if not exercised***

Public alerting in Canada is branded uniquely multiple times, nationally as Alert Ready and provincially by EMO's, such as SaskAlert or BC Emergency Alert. Across provinces, public alerting is also managed individually, with some police services having delegated use of the NPAS, while others must navigate external partner intricacies to have alerts sent out. This siloed approach to public alerting in Canada can and does leave police services vulnerable to criticism and risk. This is true with respect to the delays and time it takes to distribute emergency alerts, echoed by multiple interview participants. Police must have individual access to distribute alerts or have solid, exercised and documented practices in place to expedite alerting protocols. The public will seek alternate means of communication in the absence of, or extreme delays in, alerts.

Situational circumstances impact police response. Participants highlighted that best practices gleaned from other urgent safety threat examples, both internal and external to their service, influenced their approach to public alerting. Police participants (H and Y for example) have processes in place that help inform alert decision making, such as checklists and message templates. Further, the uncertainty of an evolving, dangerous situation is always complex, as noted by Participant K, yet it is an important consideration in determining whether an alert is distributed.

Police decision makers must consider the greater public behaviour and response to emergency alert messages, yet they cannot control how the public will ultimately respond (Sellnow & Seeger, 2021). This is critical given the police's responsibility to warn the public of

an imminent safety threat and the risk associated with distributing an emergency alert. Could it worsen the situation? Participants K and S considered how saturated streets may prevent emergency medical services from reaching a patient or risk evacuee safety when occupied vehicles are at a standstill, exposed on a highway. Seeger and Sellnow (2021) stated, "…a crisis can be a significant force in political and social change and may determine what actions government might take" (p. 9). One participant noted the "court of public opinion" can be a mitigating factor in police alerting decision-making, given past tragedies. Further, an interviewee noted there may be a necessity to testify about the alerting approach at public inquiries or inquests, and ultimately, alerts should be "the last gasp."

Despite what may publicly seem straightforward, Participant K noted that making the decision to issue an emergency alert can be "agonizing" and there can be resistance to doing so. This is the result of the many complex investigative, operational and public safety factors interviewees shared. Although public anxiety can result (Wenjing & Newhagen, 2010, 2012), Sellnow and Seeger (2021) share that "Warnings rarely, if ever, cause panic" (p. 38). The possibility of public panic should not be a mitigating factor in police determining whether or not to distribute an alert. Some interviewees noted that they face the frequent reality of having situations or investigations that could conceivably require an emergency alert, but in reality, an alert may not help the situation. Public safety risk and grievous, bodily harm considerations should always be paramount.

### *Embed strategic communications personnel in operational response*

Interviews indicated there is a varied approach to emergency alerting across Canadian police. Some CIC's undertake this responsibility; it may fall to a RTOC or even communications or media relations teams. The fluidity and complexity of a situation, noted by Participant K, can

mean that ten minutes into an event, a situation can change substantially. This new information was referred to as "hand grenades" dropped into a police service's lap to manage, and an imminent decision and action are required. Additionally, beyond the core requirement of public alerting, within this study's findings are all the other communications tactics the public expects their local police to use to communicate during an imminent safety threat situation: local news media, police social media, subscription-based alert, police news release and even door-to-door notification, by order of expectancy.

Given this study's recommendations for police-public education and awareness, building trust and use of supplemental communication tactics, police services must identify who will lead communications approach in advance of and during an unfolding event. This includes determining who will write news releases, liaise with reporters, write speaking notes, prepare a press conference, post to and monitor social media, update a public website, etcetera. In addition to communications recommendations noted, police must determine whether embedding communications personnel in both training and operational response will expedite the service's approach to the unfolding event, meet public expectation and reduce required communication tasks assigned to others engaged in the unfolding event.

**Practical Implications**

Canada's high violent crime severity index is of concern, and the necessity for public alerting research is more relevant than ever (Statistics Canada, 2023). Mass casualties involving only one accused murderer in rural Nova Scotia in 2020 and Saskatchewan in 2022 have highlighted the need for timely police communication during imminent and rapidly unfolding life-threatening situations. This study examined both the public's existing emergency alerting knowledge and the police's approach to and use of emergency alerts. Examination of law

enforcement contributions and response in this mixed-methods research balances public opinion and commentary with legitimate police insight and decision making considerations. This approach also adheres to the gathering of multiple sources of data, rather than relying on a single source.

As noted, this study should encourage law enforcement self-awareness, highlighting potential gaps in knowledge and best practices. Broader societal impacts may bring heightened public, police board and leadership or council attention to local police use of emergency alerting, or lack thereof. The implications are varied if local police have little to no knowledge or processes for alerting, if questioned.

Notably, I identified three separate announcements of third-party subscription-based alerting tools by Canadian municipal or provincial governments during this study. In June 2025, the Province of Nova Scotia announced a one-million-dollar contract with Alertable to "…help improve the emergency alert system in the province" (Gorman). The City of Ottawa, Ontario, launched subscription-based Ottawa Alert on May 5, 2025, which is powered by Alertable, on a $90,000.00 five-year contract, with yearly costs estimated to be approximately $30,000.00 (B. Gooding, personal communication, July 10, 2025). The City of Regina, Saskatchewan re-launched its subscription-based emergency alert system via Everbridge's notifynow platform in April 2025, at an approximate cost of $42,000.00 annually (K. Olsen, personal communication, July 8, 2025), funded through their Emergency Preparedness Branch. These are only three examples of taxpayer funds disbursed to for-profit, subscription-based alerting companies, and I suspect there are many others. This is important given Pelmorex is currently the primary funder of the NPAS (CRTC, 2009, par. 11). It is clear that gaps in the NPAS exist, given municipal, provincial or other governments could be delegated use of 111 non-broadcast intrusive event

options (Maier, 2023). In the context of policing, in the absence of strict partner guidelines and processes, the potential exists for community-based subscription alert crossover and incorrect or investigative information to be unintentionally shared with subscribers.

**Limitations and Future Research**

Through this study, I have contributed to scholarship across law enforcement and public alerting research, especially with a Canadian-centred lens. Despite this, given the subject matter has limited existing inquiry, my investigation must be considered an introductory exploration and is a first step in examining the vast subject matter available. This section aims to identify future research potential.

Cresswell and Cresswell (2023) state, "…a topic *can* be researched if a researcher has participants willing to serve in the study" (p. 27). While this study is limited by the responses from interview and survey participants, future researchers would benefit from analyzing additional police service and public perspectives. This thesis did not incorporate data from northern Canadian territories due to limited data available, and focuses on survey respondents aged 19-65 in accordance with ethics clearance received. Geo or demographically-specific, such as individual provincial, territorial or community-focused, studies can examine localized police trust, expectation and perception.

This study confirms the importance and expectation of police communication with the public during imminent safety threat situations. Organizational dynamics between sworn officers and civilian colleagues/teams were not explored as part of this research. Given that emergency alerting is a public communication tactic, it would be beneficial to explore the vital role civilian communications or media relations practitioners fill during imminent safety threat situations and organizational attitudes towards embedding civilian communications experts in operational

response. Are communications teams trusted and relied upon by police investigators managing unfolding events? Are they sought after internally for their expertise in communicating with the public? How can trust be built to help bridge sworn and civilian employee gaps? Is there civilian communications personnel support within police services? This insight can be key in supporting implementation of this study's recommendations and strengthening police operational response.

Indigenous community-focused studies underlining a localized approach to policing and impacts of colonization on emergency alerting and trust in police would also prove beneficial. 11 people died and 17 were injured in a mass casualty stabbing on James Smith Cree Nation, an Indigenous community in Saskatchewan, and nearby Weldon in 2022. In 2024, James Smith Cree Nation signed on to a new subscription-based alerting system to "…send community-based safety alerts directly to their members…" (Dayal, 2024) This example highlights the need for more focused research in this area.

The survey was available only in English as the researcher is unilingual. French language selection was not included, yet I incorporated Quebec and Newfoundland – provinces with French as an Official Language - responses into survey results. Peytcheva explored how language comprehension problems can occur within different cultures. Peytcheva noted, "…word meaning and sentence meaning in language comprehension depend on pre-existing background knowledge about not only the grammatical norms associated with the language, but also the cultural norms and practices related to it" (2020, p. 5). The absence of respondents with French as a first or primary language is unknown and is considered a limitation in this study; however, further exploration of this research subject in French should be undertaken by or with a bilingual investigator.

Police-centred case studies and best practices beyond those already publicly scrutinized would benefit from examination. Public proximity to a recent emergency alert event, police response and use of emergency alerting as a communication tool could be analysed, news and media coverage and reporter lines of inquiry, social media reach and investigational implications, as well as cross-referencing findings within this thesis, would prove beneficial.

It would be advantageous to critically analyze subscription-based mass and emergency notification systems in Canada. This could include an overarching cost-benefit analysis to attempt to determine whether a modernized and expanded NPAS could fill gaps that for-profit, subscription-based tools currently fill across Canada – examples of which are noted within the *Practical Implications* section.

I'd be remiss in not highlighting the lack of participation by EMOs I approached across Canada. I maintain that awareness and impacts of EMO processes, procedures, training and roles in police-issued public alerts would provide unique awareness of existing variances or collaboration between emergency agencies. Exploration of this subject is highly encouraged.

While this study incorporates results from Public Safety Canada Access to Information Act Requests, I will be in receipt of additional request results in late 2025, following a wait in excess of eight months. The usefulness of this public disclosure material, which will be publicly available thereafter, paired with analysis of the CRTC's (2025) public survey results and consultation on NPAS improvements, may be insightful. Finally, a critical examination of the NPAS's future beyond August 2026 and the use of this platform as an emergency communication tool in Canada would prove beneficial to the greater public beyond the scope of policing.

This study has specific dates for data collection. It's important to note that time, future police investigations, mass casualties or other imminent safety threat situations could influence future response to the same lines of study inquiry.

**Concluding Remarks and Recommendations**

Canadian police services can no longer be observers of the NPAS. How other agencies utilize this communication tool should be of particular interest, and I hope the findings of this study encourage police services to be active participants in initiating positive change within their own organization and at a national level. Overall, it is my intent that police services will benefit from this study's findings. At the very least, the insights gleaned can provide baseline knowledge and reference that police can compare and contrast with their existing communication practices, understanding and procedures during urgent safety threats. Police services should be empowered by the shared approaches to public alerting across Canada and advocate for the best possible access and processes to support their urgent threat communication and mitigate human and organizational risk. In short, the bar for the Canadian police's approach to public alerting has been set. Every police service needs to be on board, have knowledgeable staff and processes in place to use public alerting to its full potential during an urgent safety threat situation to help mitigate casualties and harm. Inadequate police representation on national emergency alerting working groups and committees can leave cracks in the alerting approach. Including the police service perspective specifically and incorporating police voices in further academic endeavours only benefits all parties.

Public alerting education must not rest solely with the police. Findings indicate, at the most basic level, there are gaps in knowledge about who the local police are and how they will communicate with the public during urgent threats to safety. The public must be empowered to

take ownership of their education and not leave it to chance to know whether they will be informed by police of events impacting their well-being.

While the CRTC's (2025) public consultation opens the door for consideration of proposed improvements to the public alerting system, it is set to conclude only nine months prior to Pelmorex's broadcasting license expiry. It is an opportunity for police, particularly via the strengths and voice of the CACP Emergency Alerting Subcommittee, to initiate momentum and change. Police can contribute to this timely conversation by sharing best practices and experience, particularly given the previous limited opportunity to do so. The public can contribute by sharing personal experience and expectations to advance the betterment of urgent safety threat communication in their community and across Canada. In addition, it is unknown whether Public Safety Canada's exploratory RFI may result in future procurement of services, particularly in light of planned Federal government budget cuts (Zimonjic, 2025).

The findings will benefit scholars by expanding the body of limited existing research on police communication during imminent safety situations and public response, as well as the current state and use of the NPAS. Time matters during unfolding safety events, and expedient, relevant, and targeted police communication issued can have a meaningful impact on the incident outcome and human casualties. It is not adequate for the police to assume the public will educate themselves on potential imminent safety threat communication. It is critical that police have a plan in place to mitigate risk immediately, helping build trust, meet or exceed expectations and be identified by the public as the primary authority on safety threat communication. In the absence of this, another source will fill this gap.

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# Appendices

## Appendix A

## Interview Guide

**Interview Guide**

Disclosure: The interviewer would like to proactively disclose their employment with the Royal Canadian Mounted Police as a strategic communications advisor and alert issuer with the Saskatchewan RCMP. Their research is undertaken to fulfill the requirements of the Master of Art in Communication program at Mount Saint Vincent University and the findings are to inform their role as a researcher and not as an employee of the RCMP.

You are welcomed to share your ideas and knowledge freely.

Identification of individual: police services and participants will not be individually identified. Some data may indicate the general police service size or geographic characteristics.

### Observation Protocol/Guide

Behavioural observations: interviews to be conducted. Because some interviews will be held remotely, behavioural observations will be limited.

**Demographic Data**

Time:

Place:

Date:

Who interview is with:

Police service representing:

Where observations are taking place: In an office setting, at a computer screen

**Notes**

| Descriptive notes – portraits of participation, dialogue, description of physical settings, accounts of events | Reflexive notes – researcher's thoughts, speculation on feelings, problems, hunches, impressions, prejudices |
| --- | --- |
| | |
| | |

**Interview Protocol**

**Introduction:**

- Introduce researcher
- Purpose of the study: the purpose of my research is to understand Canadian law enforcement's approach to and use of emergency alerting and determine whether police use of emergency alerting tools is understood by the public.

- Collect a signed copy of the informed consent form (or this is done in advance)

- General structure for the interview:
    o The interview will begin with some general overview questions about your police service.
    o There are three different streams of questions; all streams have a total of nine or 10 questions.
    o The interview should take approximately one hour to complete.

- Any questions before we begin?

- Before we begin, it's important for me to define some terms so I receive consistent responses to my questions from interviewees.
    o **Timeline:** Your responses to the questions should be reflective of your police service's *current* approach – not the future or anticipated, unless I specifically ask.
    o **Police-initiated public alerts:** these are emergency alerts sent to the public directly from police.
    o **National Public Alerting System:** the national alerting tool that automatically sends alerts to every member of the public in an issuing area.
    o **Subscription-based emergency alerting tools:** these are tools a police service may ask the public to sign up for and the police service may pay for this subscription service (ex. Everbridge, Voyent, etc.).
    o **Public emergency alerting**
        ▪ **Imminent threats to public safety** (i.e.. we are not referencing a simple theft file, there must be an imminent risk to public safety identified by investigators)

**Start:** *record the date and time of the interview, who it is with, including rank and policing service and how interview is being conducted*

**Interview content questions and probes** (between 5-10 max)

**Opening questions:**

1. Tell me about your policing area and people you serve.

&#10070; Probes:
  i. Tell me about the approximate population, demographics, maximum time it takes for a police officer to drive to a call for service (geographically), approximate number of police officers/staff.

2. *Interviewee*- what is your specific role in communicating with the public during imminent threat situations?
  &#10070; Probes:
    i. What makes you the subject matter expert selected for this interview?

3. What gaps or hurdles exist for police when communicating with the public during an imminent safety threat situation?
  &#10070; Probes:
    i. What does the public and/or government authorities fail to understand when it comes to public alerting and policing?
    ii. What is one thing you wish the public would understand about what you do?

4. When should police issue an emergency alert to the public?
  &#10070; Probes:
    i. Tell me more/for what circumstances?

5. During an imminent threat to public safety incident, does your police service:
  a) not distribute any public alerts?
  b) distribute public alerts via a subscription-based alerting tool?
  c) distribute public alerts via the National Public Alerting System?

**If their police service A) does not distribute any public alerts, then:**

6. Why doesn't your police service distribute public alerts?
  &#10070; Probes:
    i. Tell me more about the factors preventing your police service from using public alerting during imminent safety threat situations (resources, knowledge, etc.).

7. How does your police service communicate with the public during imminent safety threat situations?
    ❖ Probes:
        i. Tell me more about how subscription-based alerting services are provided (who created the tool)?
        ii. Tell me more about your subscription base.

8. What are the potential risks involved for not using public alerting during an imminent threat to public safety?

**If their police service B) distributes public alerts via a subscription-based tool, then:**

9. For how long has your police service used a subscription-based tool for emergency alerting and why do you use this method for alerting?
    ❖ Probes:
        i. Share more information about this. Is there a cost associated?

10. Why does your police service use a subscription-based tool for emergency alerting?
    ❖ Probes:
        i. Tell me more.

11. What are the potential risks involved for using a subscription-based public alerting tool during an imminent threat to public safety incident?
    ❖ Probes:
        i. Tell me more.

**If their police service C) distributes public alerts via the National Public Alerting System, then:**

12. Why does your police service use the National Public Alerting System for issuing emergency alerts to the public?
    ❖ Probes:
        i. Share more information about this.

13. What is your process for issuing emergency alerts via the National Public Alerting System?
    ❖ Probes:
        i. Tell me more – someone in the service, an external agency, etc.

**Closing questions:**

14. How have past police-involved critical incidents in Canada influenced your police service's approach to public alerting and emergency communication?
    - ❖ Probes:
        i. Tell me more.

15. Is there any information you would like to share about emergency alerting that we have not covered?
    - ❖ Probes:
        i. Do you have a positive example to share from their police agency's experience with alerting?
        EXAMPLE: Hockey games – template messaging – preparedness.

        ii. Is there anyone else I should speak with to learn more about your agency's approach to emergency alerting?

**Closing instructions/remarks:**

- Thank you for participating.
- Assure individual of confidentiality.
- If needed, request further interviews.
- If asked, comment on how interviewee will receive results of the study.

## Appendix B

## Survey Questionnaire

Instruction: please respond by selecting the box next to the answer of your choice.

1. What province or territory do you live in?
   a. Alberta
   b. British Columbia
   c. Manitoba
   d. New Brunswick
   e. Newfoundland and Labrador
   f. Nova Scotia
   g. Ontario
   h. Prince Edward Island
   i. Quebec
   j. Saskatchewan
   k. Northwest Territories
   l. Nunavut
   m. Yukon
2. Where do you live in Canada?
   a. I live in an Indigenous community
   b. I live in a rural or remote area, including communities with a population of less than 1,000
   c. I live in a community with a population between 1,000 and 30,000
   d. I live in a community with a population between 30,000 and 99,999
   e. I live in a community with a population between 100,000 and 499,999
   f. I live in a community with a population over 500,000
3. What age group do you belong to currently?
   a. Under 19
   b. 19-25
   c. 26-35
   d. 36-45
   e. 46-54
   f. 55-65
   g. 65+
4. Gender: How do you identify?
   a. Man
   b. Non-binary
   c. Woman
   d. Prefer to self-describe: _____

5. Are you currently employed by a Canadian police service?
   a. Yes
   b. No

**Instruction:** Several questions talk about 'urgent threat to life situations.' These are urgent situations when police would respond, such as an active shooter or dangerous person where there is an urgent risk to public safety. Please respond by selecting the box next to the answer of your choice.

6. I know who my local police are.
   a. Yes
   b. No
   c. Unsure

*7.* How do your local police tell you about urgent threats to your life, such as dangerous person or active shooter situations?
   *Select all that apply.*
   a. News release posted to my local police service's website
   b. Local news media reporting
   c. Police service's social media channels
   d. An emergency alert is issued to my cell phone automatically
   e. I signed up to receive emergency information on a police service app
   f. I'm NOT informed by my local police when there is an urgent threat to the public
   g. Other:_____

8. Do your local police issue emergency alerts to your cell phone when there is an urgent threat?
   a. Yes
   b. No
   c. I don't know
   d. I don't have a cell phone

9. How do you receive emergency alerts from your local police?
   a. I signed up to receive emergency alerts from my local police
   b. I automatically receive emergency alerts from my local police
   c. I don't know if my local police can send me an emergency alert
   d. Other:_____

10. I expect to be told by my local police when there is an urgent safety threat that is:
    a. 0-30 kilometers away from me
    b. 30-60 kilometers away from me
    c. 60-90 kilometers away from me
    d. More than 90 kilometers away from me
    e. I don't care to receive information about urgent threats to my life

11. I trust that my local police will tell me when there is an urgent threat impacting public safety.
    a. Strongly agree
    b. Agree
    c. Neutral
    d. Disagree
    e. Strongly disagree

12. Select the **top three** tools you expect your local police to use to communicate with the public when an urgent threat situation is unfolding:
    *Select three choices:*
    a. News release posted to my local police service's website
    b. Local news media reporting (radio, television, news website)
    c. Social media posts on my local police service's channels
    d. An automatic emergency alert is issued to my phone
    e. An emergency alert is sent to me because I signed up to receive this information
    f. Door to door or in-person notification by police
    g. Other: _____

13. My local police do a good job educating the public about emergency alerts and how they are used during urgent safety situations.
    a. Strongly agree
    b. Agree
    c. Neutral
    d. Disagree
    e. Strongly disagree

14. Do you have any other comments or opinions about police use of emergency alerts you would like to share?

**End of survey statement**

Thank you for taking the time to complete this survey. Your feedback is extremely valuable.

This study has received ethics clearance through a Mount Saint Vincent University Research Ethics Board. If you have questions for the board, contact them at ethics@msvu.ca. For all questions or general comments, contact the researcher, Mandy Maier, Master of Arts in Communications graduate student, by email: Mandy.Maier1@MSVU.CA

**Appendix C**

**Interview Axial Coding**

1. **Personal Knowledge and Experience**

*Defined as: Police preparedness and/or investigative experience affect the approach to emergency alerting during an imminent safety threat situation.*

Axial code: Knowledge application

1.1 Preparedness

1.2 Investigative understanding

1.3 Career experience

2. **Strategy and Risk Impacts on Police Decision Making**

*Defined as: The police must weigh emergency alerting risk and the responsibilities of public safety during an imminent safety threat situation.*

Axial code: Strategy and risk

2.1 Responsibility – public safety

2.2 Risks

2.3 Fatigue/over-alerting

2.4 Trust

## 3. External Influence on Emergency Alerting

*Defined as: Emergency alerting has external influences beyond the scope of the police.*

Axial code: External factors

3.1 Geographic consideration

3.2 Interoperability

3.3 Public expectation

3.4 Traditional/legacy or social media

3.5 Public response and being 'challenged'

## 4. Alerting Approach Differs Across Agencies

*Defined as: Police use of emergency alerting as a communication tool is impacted by a service's overall approach to and knowledge of emergency alerting.*

Axial code: Alert strategy

4.1 Alerting decision making

4.2 Alerting process

4.3 Alerting tools

4.4 Alerting training

4.5 Alerting content

**Figure 5**: **Main themes, related definition and codes from interviews.**

**Appendix D**

**Survey Research Findings and Tables**

**Table 1**

*Descriptive Characteristics of the 2025 Emergency Alert Survey*

| Independent variables | Coding | Sample Total | |
|---|---|---|---|
| | | *n* | % |
| Q1 What province or territory do you live in? | 1 = British Columbia | 66 | 13.58 |
| | 2 = Alberta | 47 | 9.67 |
| | 3 = Saskatchewan | 13 | 2.67 |
| | 4 = Manitoba | 22 | 4.53 |
| | 5 = Ontario | 211 | 43.42 |
| | 6 = Quebec | 95 | 19.55 |
| | 7 = New Brunswick | 12 | 2.47 |
| | 8 = Nova Scotia | 8 | 1.65 |
| | 9 = Prince Edward Island | 3 | 0.62 |
| | 10 = Newfoundland and Labrador | 9 | 1.85 |
| | 11 = Northwest Territories | 0 | 0.00 |
| | 12 = Yukon | 0 | 0.00 |
| | 13 = Nunavut | 0 | 0.00 |

| Q2 Where do you live in Canada? | 1 = I live in an Indigenous community | 4 | 0.82 |
|---|---|---|---|
| | 2 = I live in a rural or remote area, including communities with a population of less than 1,000 | 38 | 7.82 |
| | 3 = I live in a community with a population between 1,000 and 30,000 | 86 | 17.70 |
| | 4 = I live in a community with a population between 30,000 and 99,999 | 62 | 12.76 |
| | 5 = I live in a community with a population between 100,000 and 499,999 | 115 | 23.66 |
| | 6 = I live in a community with a population over 500,000 | 181 | 37.24 |
| Q3 What age group do you belong to currently? | 1 = Under 19 | 0 | 0.00 |
| | 2 = 19-25 | 66 | 13.58 |
| | 3 = 26-35 | 96 | 19.75 |
| | 4 = 36-45 | 102 | 20.99 |
| | 5 = 46-54 | 120 | 24.69 |
| | 6 = 55-65 | 102 | 20.99 |
| | 7 = 65+ | 0 | 0.00 |
| Q4 How do you identify? | 1 = Man | 239 | 49.18 |
| | 2 = Non-binary | 3 | 0.62 |
| | 3 = Woman | 241 | 49.59 |
| | 96 = Prefer to self-describe: | 3 | 0.62 |
| Q5 Are you currently employed by a Canadian police service? | 1 = Yes | 15 | 3.09 |
| | 2 = No | 471 | 96.91 |

| | | | |
|---|---|---|---|
| Q6 I know who my local police are. | 1 = Yes | 350 | 72.02 |
| | 2 = No | 101 | 20.78 |
| | 3 = Unsure | 35 | 7.20 |
| | | | |
| *Q7 How do your local police tell you about urgent threats to your life, such as dangerous person or active shooter situations? Select all that apply. | Q7r1 = News release posted to my local police service's website | 106 | 21.81 |
| | Q7r2 = Local news media reporting | 236 | 48.56 |
| | Q7r3 = Police service's social media channels | 163 | 33.54 |
| | Q7r4 = An emergency alert is issued to my cell phone automatically | 216 | 44.44 |
| | Q7r5 = I signed up to receive emergency information on a police service app | 16 | 3.29 |
| | Q7r96 = Other: | 16 | 3.29 |
| | Q7r97 = I'm NOT informed by my local police when there is an urgent threat to the public | 95 | 19.55 |
| | | | |
| Q8 Do your local police issue emergency alerts to your cell phone when there is an urgent threat? | 1 = Yes | 220 | 45.27 |
| | 2 = No | 114 | 23.46 |
| | 97 = I don't have a cell phone | 6 | 1.23 |
| | 98 = I don't know | 146 | 30.04 |
| | | | |
| Q9 How do you receive emergency alerts from your local police? | 1 = I signed up to receive emergency alerts from my local police | 27 | 5.56 |
| | 2 = I automatically receive emergency alerts from my local police | 194 | 39.92 |
| | 3 = I don't know if my local police can send me an emergency alert | 256 | 52.67 |
| | 96 = Other: | 9 | 1.85 |

| Q10 I expect to be told by my local police when there is an urgent safety threat that is: | 1 = 0-30 kilometers away from me | 303 | 62.35 |
|---|---|---|---|
| | 2 = 30-60 kilometers away from me | 105 | 21.60 |
| | 3 = 60-90 kilometers away from me | 29 | 5.97 |
| | 4 = More than 90 kilometers away from me | 24 | 4.94 |
| | 5 = I don't care to receive information about urgent threats to my life | 25 | 5.14 |
| | | | |
| Q11 I trust that my local police will tell me when there is an urgent threat impacting public safety. | 5 = Strongly agree | 151 | 31.07 |
| | 4 = Agree | 189 | 38.89 |
| | 3 = Neutral | 102 | 20.99 |
| | 2 = Disagree | 38 | 7.82 |
| | 1 = Strongly disagree | 6 | 1.23 |
| | | | |
| *Q12 Select the top three tools you expect your local police to use to communicate with the public when an urgent threat situation is unfolding: | Q12r1 = News release posted to my local police service's website | 147 | 30.25 |
| | Q12r2 = Local news media reporting (radio, television, news website) | 344 | 70.78 |
| | Q12r3 = Social media posts on my local police service's channels | 261 | 53.70 |
| | Q12r4 = An automatic emergency alert is issued to my phone | 398 | 81.89 |
| | Q12r5 = An emergency alert is sent to me because I signed up to receive this information | 178 | 36.63 |
| | Q12r6 = Door to door or in-person notification by police | 125 | 25.72 |
| | Q12r96 = Other: | 5 | 1.03 |

| | | | |
|---|---|---|---|
| Q13 My local police do a good job educating the public about emergency alerts and how they are used during urgent safety situations. | 5 = Strongly agree | 58 | 11.93 |
| | 4 = Agree | 149 | 30.66 |
| | 3 = Neutral | 179 | 36.83 |
| | 2 = Disagree | 88 | 18.11 |
| | 1 = Strongly disagree | 12 | 2.47 |

*Note. n* = 486 respondents. *Programmer randomized responses in survey.

**Table 2**

*Descriptive Statistics for Q11 and Q13*

|  | Mean | Std. Deviation | *n* |
|---|---|---|---|
| Q11: I trust that my local police will tell me when there is an urgent threat impacting public safety. | 3.91 | 0.968 | 486 |
| Q13: My local police do a good job educating the public about emergency alerts and how they are used during urgent safety situations. | 3.31 | 0.983 | 486 |

**Table 3**

*Bivariate Correlations Statistics for Q11 and Q13*

|  |  | Q11: I trust that my local police will tell me when there is an urgent threat impacting public safety. | Q13: My local police do a good job educating the public about emergency alerts and how they are used during urgent safety situations. |
|---|---|---|---|
| Q11: I trust that my local police will tell me when there is an urgent threat impacting public safety. | Pearson Correlation | 1 | .600** |
|  | Sig. (2-tailed) |  | 0.000 |
|  | N | 486 | 486 |
| Q13: My local police do a good job educating the public about emergency alerts and how they are used during urgent safety situations. | Pearson Correlation | .600** | 1 |
|  | Sig. (2-tailed) | 0.000 |  |
|  | N | 486 | 486 |

**Notes:** **Correlation is significant at the 0.01 level (2-tailed).

**Table 4**

*Descriptive Statistics for Q11, Q13 and Age Range (Q3)*

| | Q3 What age group do you belong to currently? | *n* | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | |
|---|---|---|---|---|---|---|---|
| | | | | | | Lower Bound | Upper Bound |
| Q11: I trust that my local police will tell me when there is an urgent threat impacting public safety. | 19-25 | 66 | 3.89 | 0.994 | 0.122 | 3.65 | 4.14 |
| | 26-35 | 96 | 3.98 | 0.858 | 0.088 | 3.81 | 4.15 |
| | 36-45 | 102 | 3.90 | 0.939 | 0.093 | 3.72 | 4.09 |
| | 46-54 | 120 | 3.93 | 1.022 | 0.093 | 3.74 | 4.11 |
| | 55-65 | 102 | 3.83 | 1.025 | 0.102 | 3.63 | 4.03 |
| | Total | 486 | 3.91 | 0.968 | 0.044 | 3.82 | 3.99 |
| Q13: My local police do a good job educating the public about emergency alerts and how they are used during urgent safety situations. | 19-25 | 66 | 3.38 | 1.064 | 0.131 | 3.12 | 3.64 |
| | 26-35 | 96 | 3.45 | 0.993 | 0.101 | 3.25 | 3.65 |
| | 36-45 | 102 | 3.28 | 1.018 | 0.101 | 3.08 | 3.48 |
| | 46-54 | 120 | 3.29 | 0.902 | 0.082 | 3.13 | 3.45 |
| | 55-65 | 102 | 3.21 | 0.978 | 0.097 | 3.01 | 3.40 |
| | Total | 486 | 3.31 | 0.983 | 0.045 | 3.23 | 3.40 |

**Table 5**

*ANOVA Statistics for Q11, Q13 and Age Range (Q3)*

|  |  | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| Q11: I trust that my local police will tell me when there is an urgent threat impacting public safety. | Between Groups | 1.106 | 4 | 0.277 | 0.293 | 0.882 |
|  | Within Groups | 453.727 | 481 | 0.943 |  |  |
|  | Total | 454.833 | 485 |  |  |  |
| Q13: My local police do a good job educating the public about emergency alerts and how they are used during urgent safety situations. | Between Groups | 3.340 | 4 | 0.835 | 0.863 | 0.486 |
|  | Within Groups | 465.493 | 481 | 0.968 |  |  |
|  | Total | 468.833 | 485 |  |  |  |

**Table 6**

*Descriptive Statistics: Q11, 13 and Province (Q1)*

| | Q1 What province or territory do you live in? | *n* | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | |
|---|---|---|---|---|---|---|---|
| | | | | | | Lower Bound | Upper Bound |
| Q11: I trust that my local police will tell me when there is an urgent threat impacting public safety. Min = 1 Max = 5 | British Columbia | 66 | 3.92 | 0.950 | 0.117 | 3.69 | 4.16 |
| | Alberta | 47 | 4.15 | 1.021 | 0.149 | 3.85 | 4.45 |
| | Saskatchewan | 13 | 4.08 | 0.862 | 0.239 | 3.56 | 4.60 |
| | Manitoba | 22 | 3.86 | 0.834 | 0.178 | 3.49 | 4.23 |
| | Ontario | 211 | 3.88 | 0.931 | 0.064 | 3.76 | 4.01 |
| | Quebec | 95 | 3.80 | 1.058 | 0.109 | 3.58 | 4.02 |
| | New Brunswick | 12 | 4.08 | 0.900 | 0.260 | 3.51 | 4.66 |
| | Nova Scotia | 8 | 4.13 | 1.126 | 0.398 | 3.18 | 5.07 |
| | Prince Edward Island | 3 | 2.67 | 1.155 | 0.667 | -0.20 | 5.54 |
| | Newfoundland and Labrador | 9 | 4.11 | 0.928 | 0.309 | 3.40 | 4.82 |
| | Total | 486 | 3.91 | 0.968 | 0.044 | 3.82 | 3.99 |
| Q13: My local police do a good job educating the public about emergency alerts and how they are used during urgent safety situations. | British Columbia | 66 | 3.26 | 0.997 | 0.123 | 3.01 | 3.50 |
| | Alberta | 47 | 3.55 | 1.059 | 0.155 | 3.24 | 3.86 |
| | Saskatchewan | 13 | 3.54 | 0.776 | 0.215 | 3.07 | 4.01 |
| | Manitoba | 22 | 3.59 | 0.796 | 0.170 | 3.24 | 3.94 |
| | Ontario | 211 | 3.26 | 0.921 | 0.063 | 3.13 | 3.38 |
| | Quebec | 95 | 3.16 | 1.014 | 0.104 | 2.95 | 3.36 |
| | New Brunswick | 12 | 3.75 | 1.215 | 0.351 | 2.98 | 4.52 |
| | Nova Scotia | 8 | 3.63 | 1.188 | 0.420 | 2.63 | 4.62 |
| | Prince Edward Island | 3 | 2.33 | 1.528 | 0.882 | -1.46 | 6.13 |
| | Newfoundland and Labrador | 9 | 4.00 | 1.000 | 0.333 | 3.23 | 4.77 |
| | Total | 486 | 3.31 | 0.983 | 0.045 | 3.23 | 3.40 |

**Table 7**

*ANOVA Statistics: Q 11, Q13 and Province (Q1)*

|  |  | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| Q11: I trust that my local police will tell me when there is an urgent threat impacting public safety. | Between Groups | 10.156 | 9 | 1.128 | 1.208 | 0.288 |
|  | Within Groups | 444.678 | 476 | 0.934 |  |  |
|  | Total | 454.833 | 485 |  |  |  |
| Q13: My local police do a good job educating the public about emergency alerts and how they are used during urgent safety situations. | Between Groups | 18.443 | 9 | 2.049 | 2.166 | 0.023 |
|  | Within Groups | 450.391 | 476 | 0.946 |  |  |
|  | Total | 468.833 | 485 |  |  |  |

**Table 8**

*Group Statistics for Q11, Q13 and Identification (Q4)*

| Q4: How do you identify? |  | $n$ | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Q11: I trust that my local police will tell me when there is an urgent threat impacting public safety. | Man | 239 | 3.90 | 0.961 | 0.062 |
|  | Woman | 241 | 3.94 | 0.966 | 0.062 |
| Q13: My local police do a good job educating the public about emergency alerts and how they are used during urgent safety situations. | Man | 239 | 3.36 | 1.032 | 0.067 |
|  | Woman | 241 | 3.29 | 0.926 | 0.060 |

*Note.* Man and woman only selected due to sample size.

**Table 9**

*Independent Samples Test for Q11, Q13 and Identification (Q4)*

| | | Levene's Test for Equality of Variances | | *t*-test for Equality of Means | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| | | F | Sig. | t | df | Significance | |
| | | | | | | One-Sided p | Two-Sided p |
| Q11: I trust that my local police will tell me when there is an urgent threat impacting public safety. | Equal variances assumed | 0.456 | 0.500 | -0.434 | 478 | 0.332 | 0.664 |
| | Equal variances not assumed | | | -0.434 | 477.997 | 0.332 | 0.664 |
| Q13: My local police do a good job educating the public about emergency alerts and how they are used during urgent safety situations. | Equal variances assumed | 4.652 | 0.032 | 0.822 | 478 | 0.206 | 0.411 |
| | Equal variances not assumed | | | 0.822 | 471.623 | 0.206 | 0.412 |

**Table 10**

*Descriptive Statistics for Q11, Q13, Where Do You Live in Canada (Q2)*

| | | *n* | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | |
|---|---|---|---|---|---|---|---|
| | | | | | | Lower Bound | Upper Bound |
| Q11: I trust that my local police will tell me when there is an urgent threat impacting public safety. | I live in an Indigenous community | 4 | 4.25 | 1.500 | 0.750 | 1.86 | 6.64 |
| | I live in a rural or remote area, including communities with a population of less than 1,000 | 38 | 3.74 | 0.978 | 0.159 | 3.42 | 4.06 |
| | I live in a community with a population between 1,000 and 30,000 | 86 | 3.98 | 0.958 | 0.103 | 3.77 | 4.18 |
| | I live in a community with a population between 30,000 and 99,999 | 62 | 3.81 | 0.902 | 0.115 | 3.58 | 4.04 |
| | I live in a community with a population between 100,000 and 499,999 | 115 | 3.92 | 0.966 | 0.090 | 3.74 | 4.10 |
| | I live in a community with a population over 500,000 | 181 | 3.93 | 0.989 | 0.074 | 3.78 | 4.07 |
| | Total | 486 | 3.91 | 0.968 | 0.044 | 3.82 | 3.99 |

| Q13: My local police do a good job educating the public about emergency alerts and how they are used during urgent safety situations. | I live in an Indigenous community | 4 | 3.75 | 1.258 | 0.629 | 1.75 | 5.75 |
| | I live in a rural or remote area, including communities with a population of less than 1,000 | 38 | 3.29 | 0.927 | 0.150 | 2.98 | 3.59 |
| | I live in a community with a population between 1,000 and 30,000 | 86 | 3.38 | 1.008 | 0.109 | 3.17 | 3.60 |
| | I live in a community with a population between 30,000 and 99,999 | 62 | 3.24 | 0.862 | 0.110 | 3.02 | 3.46 |
| | I live in a community with a population between 100,000 and 499,999 | 115 | 3.26 | 0.965 | 0.090 | 3.08 | 3.44 |
| | I live in a community with a population over 500,000 | 181 | 3.34 | 1.034 | 0.077 | 3.19 | 3.49 |
| | Total | 486 | 3.31 | 0.983 | 0.045 | 3.23 | 3.40 |

**Table 11**

*Descriptive Statistics for Q11, I Know Who My Local Police Are (Q6)*

|  | *n* | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | |
|---|---|---|---|---|---|---|
|  |  |  |  |  | Lower Bound | Upper Bound |
| Yes | 350 | 4.01 | 0.897 | 0.048 | 3.91 | 4.10 |
| No | 101 | 3.59 | 1.079 | 0.107 | 3.38 | 3.81 |
| Unsure | 35 | 3.80 | 1.132 | 0.191 | 3.41 | 4.19 |
| Total | 486 | 3.91 | 0.968 | 0.044 | 3.82 | 3.99 |

**Table 12**

*ANOVA for Q11, I Know Who My Local Police Are (Q6)*

|  | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 13.903 | 2 | 6.951 | 7.615 | 0.001 |
| Within Groups | 440.931 | 483 | 0.913 |  |  |
| Total | 454.833 | 485 |  |  |  |

*Note.* * The mean difference is significant at the .05 level.

**Table 13**

*Tukey HSD - Multiple Comparisons: Q11, I Know Who My Local Police Are (Q6)*

| Q6: I know who my local police are. | | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| Yes | No | .41* | 0.108 | 0.000 | 0.16 | 0.67 |
| | Unsure | 0.21 | 0.169 | 0.435 | -0.19 | 0.61 |
| No | Yes | -.41* | 0.108 | 0.000 | -0.67 | -0.16 |
| | Unsure | -0.21 | 0.187 | 0.515 | -0.65 | 0.23 |
| Unsure | Yes | -0.21 | 0.169 | 0.435 | -0.61 | 0.19 |
| | No | 0.21 | 0.187 | 0.515 | -0.23 | 0.65 |

*Note.* Based on observed means. The error term is Mean Square(Error) = .913.
* The mean difference is significant at the .05 level.

**Table 14**

*Descriptive Statistics for Q6, Province (Q1) and Region of Canada (Combined Provinces)*

| Q1 What province or territory do you live in? | Q12 I know who my local police are. | Sample Total | |
|---|---|---|---|
| | | *n* | % |
| British Columbia | Yes | 46 | 69.70% |
| | No | 13 | 19.70% |
| | Unsure | 7 | 10.61% |
| Alberta | Yes | 35 | 74.47% |
| | No | 7 | 14.89% |
| | Unsure | 5 | 10.64% |
| Saskatchewan | Yes | 7 | 53.85% |
| | No | 6 | 46.15% |
| | Unsure | 0 | 0% |
| Manitoba | Yes | 18 | 81.82% |
| | No | 4 | 18.18% |
| | Unsure | 0 | 0% |
| Ontario | Yes | 158 | 74.88% |
| | No | 38 | 18.01% |
| | Unsure | 15 | 7.11% |
| Quebec | Yes | 63 | 66.32% |
| | No | 25 | 26.32% |
| | Unsure | 7 | 7.37% |
| New Brunswick | Yes | 10 | 83.33% |
| | No | 1 | 8.33% |

| | | | |
|---|---|---|---|
| | Unsure | 1 | 8.33% |
| Nova Scotia | Yes | 5 | 62.50% |
| | No | 3 | 37.50% |
| | Unsure | 0 | 0% |
| Prince Edward Island | Yes | 1 | 33.33% |
| | No | 2 | 66.67% |
| | Unsure | 0 | 0% |
| Newfoundland and Labrador | Yes | 7 | 77.78% |
| | No | 2 | 22.22% |
| | Unsure | 0 | 0% |
| | | | |
| Atlantic Provinces | Yes | 23 | 71.88% |
| | No | 8 | 25% |
| | Unsure | 1 | 3.13% |
| Central Provinces | Yes | 221 | 72.22% |
| | No | 63 | 20.59% |
| | Unsure | 22 | 7.19% |
| Prairie Provinces | Yes | 60 | 73.17% |
| | No | 17 | 20.73% |
| | Unsure | 5 | 6.10% |
| West Coast | Yes | 46 | 69.70% |
| | No | 13 | 19.70% |
| | Unsure | 7 | 10.61% |

**Table 15**

*Group and Descriptive Statistics for Q12, Identification (Q4)*

| Q12 Select the top three tools you expect your local police to use to communicate with the public when an urgent threat situation is unfolding: | Q4: How do you identify? | *n* | % |
|---|---|---|---|
| Q12r1: News release posted to my local police service's website | Man | 77 | 32.22 |
| | Woman | 68 | 28.22 |
| Q12r2: Local news media reporting (radio, television, news website) | Man | 173 | 72.38 |
| | Woman | 167 | 69.29 |
| Q12r3: Social media posts on my local police service's channels | Man | 117 | 48.95 |
| | Woman | 140 | 58.09 |
| Q12r4: An automatic emergency alert is issued to my phone | Man | 185 | 77.41 |
| | Woman | 208 | 86.31 |
| Q12r5: An emergency alert is sent to me because I signed up to receive this information | Man | 105 | 43.93 |
| | Woman | 73 | 30.29 |
| Q12r6: Door to door or in-person notification by police | Man | 57 | 23.85 |
| | Woman | 66 | 27.39 |

**Table 16**

*Group and Descriptive Statistics for Q12, Age Group (Q3)*

| Q12 Select the top three tools you expect your local police to use to communicate with the public when an urgent threat situation is unfolding: | Q3 What age group do you belong to currently? | Sample Total | |
|---|---|---|---|
| | | *n* | % |
| Q12r1: News release posted to my local police service's website | 19-25 | 26 | 39.39% |
| | 26-35 | 35 | 36.46% |
| | 36-45 | 31 | 30.39% |
| | 46-54 | 31 | 25.83% |
| | 55-65 | 24 | 23.53% |
| Q12r2: Local news media reporting (radio, television, news website) | 19-25 | 43 | 65.15% |
| | 26-35 | 58 | 60.42% |
| | 36-45 | 71 | 69.61% |
| | 46-54 | 89 | 74.17% |
| | 55-65 | 83 | 81.37% |
| Q12r3: Social media posts on my local police service's channels | 19-25 | 37 | 56.06% |
| | 26-35 | 56 | 58.33% |
| | 36-45 | 58 | 56.86% |
| | 46-54 | 64 | 53.33% |
| | 55-65 | 46 | 45.10% |
| Q12r4: An automatic emergency alert is issued to my phone | 19-25 | 50 | 75.76% |
| | 26-35 | 80 | 83.33% |
| | 36-45 | 85 | 83.33% |
| | 46-54 | 99 | 82.50% |
| | 55-65 | 84 | 82.35% |
| Q12r5: An emergency alert is sent to me because I signed up to receive this information | 19-25 | 26 | 39.39% |
| | 26-35 | 35 | 36.46% |
| | 36-45 | 33 | 32.35% |
| | 46-54 | 47 | 39.17% |
| | 55-65 | 37 | 36.27% |
| Q12r6: Door to door or in-person notification by police | 19-25 | 15 | 22.73% |
| | 26-35 | 24 | 25.00% |
| | 36-45 | 27 | 26.47% |
| | 46-54 | 29 | 24.17% |
| | 55-65 | 30 | 29.41% |

**Table 17**

*Group and Descriptive Statistics for Q12, Province (Q1)*

| Q12 Select the top three tools you expect your local police to use to communicate with the public when an urgent threat situation is unfolding: | Q1 What province or territory do you live in? | Sample Total | |
|---|---|---|---|
| | | *n* | % |
| Q12r1: News release posted to my local police service's website | British Columbia | 15 | 22.73% |
| | Alberta | 16 | 34.04% |
| | Saskatchewan | 3 | 23.08% |
| | Manitoba | 5 | 22.73% |
| | Ontario | 76 | 36.02% |
| | Quebec | 27 | 28.42% |
| | New Brunswick | 3 | 25.00% |
| | Nova Scotia | 1 | 12.50% |
| | Prince Edward Island | 0 | 0.00% |
| | Newfoundland and Labrador | 1 | 11.11% |
| | | | |
| Q12r2: Local news media reporting (radio, television, news website) | British Columbia | 49 | 74.24% |
| | Alberta | 31 | 65.96% |
| | Saskatchewan | 9 | 69.23% |
| | Manitoba | 17 | 77.27% |
| | Ontario | 154 | 72.99% |
| | Quebec | 60 | 63.16% |
| | New Brunswick | 8 | 66.67% |
| | Nova Scotia | 6 | 75.00% |
| | Prince Edward Island | 3 | 100.00% |
| | Newfoundland and Labrador | 7 | 77.78% |
| | | | |
| Q12r3: Social media posts on my local police service's channels | British Columbia | 34 | 51.52% |
| | Alberta | 19 | 40.43% |
| | Saskatchewan | 6 | 46.15% |
| | Manitoba | 8 | 36.36% |
| | Ontario | 121 | 57.35% |
| | Quebec | 51 | 53.68% |
| | New Brunswick | 9 | 75.00% |
| | Nova Scotia | 5 | 62.50% |
| | Prince Edward Island | 2 | 66.67% |
| | Newfoundland and Labrador | 6 | 66.67% |

| Q12r4: An automatic emergency alert is issued to my phone | British Columbia | 59 | 89.39% |
|---|---|---|---|
| | Alberta | 42 | 89.36% |
| | Saskatchewan | 13 | 100.00% |
| | Manitoba | 21 | 95.45% |
| | Ontario | 162 | 76.78% |
| | Quebec | 72 | 75.79% |
| | New Brunswick | 10 | 83.33% |
| | Nova Scotia | 8 | 100.00% |
| | Prince Edward Island | 3 | 100.00% |
| | Newfoundland and Labrador | 8 | 88.89% |
| | | | |
| Q12r5: An emergency alert is sent to me because I signed up to receive this information | British Columbia | 23 | 34.85% |
| | Alberta | 19 | 40.43% |
| | Saskatchewan | 5 | 38.46% |
| | Manitoba | 9 | 40.91% |
| | Ontario | 69 | 32.70% |
| | Quebec | 42 | 44.21% |
| | New Brunswick | 6 | 50.00% |
| | Nova Scotia | 1 | 12.50% |
| | Prince Edward Island | 1 | 33.33% |
| | Newfoundland and Labrador | 3 | 33.33% |
| | | | |
| Q12r6: Door to door or in-person notification by police | British Columbia | 17 | 25.76% |
| | Alberta | 13 | 27.66% |
| | Saskatchewan | 1 | 7.69% |
| | Manitoba | 6 | 27.27% |
| | Ontario | 50 | 23.70% |
| | Quebec | 33 | 34.74% |
| | New Brunswick | 0 | 0.00% |
| | Nova Scotia | 3 | 37.50% |
| | Prince Edward Island | 0 | 0.00% |
| | Newfoundland and Labrador | 2 | 22.22% |

**Table 18**

*Group and Descriptive Statistics for Q12, Region of Canada (Combined Provinces)*

| Q12 Select the top three tools you expect your local police to use to communicate with the public when an urgent threat situation is unfolding: | Q1 What *province or territory do you live in? | Sample Total | |
|---|---|---|---|
| | | *n* | % |
| Q12r1: News release posted to my local police service's website | Atlantic Provinces | 5 | 15.63% |
| | Central Provinces | 103 | 33.66% |
| | Prairie Provinces | 24 | 29.27% |
| | West Coast | 15 | 22.73% |
| Q12r2: Local news media reporting (radio, television, news website) | Atlantic Provinces | 24 | 75.00% |
| | Central Provinces | 214 | 69.93% |
| | Prairie Provinces | 57 | 69.51% |
| | West Coast | 49 | 74.24% |
| Q12r3: Social media posts on my local police service's channels | Atlantic Provinces | 22 | 68.75% |
| | Central Provinces | 172 | 56.21% |
| | Prairie Provinces | 33 | 40.24% |
| | West Coast | 34 | 51.52% |
| Q12r4: An automatic emergency alert is issued to my phone | Atlantic Provinces | 29 | 90.63% |
| | Central Provinces | 234 | 76.47% |
| | Prairie Provinces | 76 | 92.68% |
| | West Coast | 59 | 89.39% |
| Q12r5: An emergency alert is sent to me because I signed up to receive this information | Atlantic Provinces | 11 | 34.38% |
| | Central Provinces | 111 | 36.27% |
| | Prairie Provinces | 33 | 40.24% |
| | West Coast | 23 | 34.85% |
| Q12r6: Door to door or in-person notification by police | Atlantic Provinces | 5 | 15.63% |
| | Central Provinces | 83 | 27.12% |
| | Prairie Provinces | 20 | 24.39% |
| | West Coast | 17 | 25.76% |

*Note.* Atlantic Provinces incorporate Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick; Central Canada incorporates Quebec and Ontario; Prairie Provinces incorporates Manitoba, Saskatchewan and Alberta; West Coast incorporates British Columbia

**Table 19**

*ANOVA for Q13, I Know Who My Local Police Are (Q6)*

|  | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 10.336 | 2 | 5.168 | 5.444 | 0.005 |
| Within Groups | 458.498 | 483 | 0.949 |  |  |
| Total | 468.833 | 485 | 0.913 |  |  |

**Table 20**

*Tukey HSD - Multiple Comparisons: Q13, I Know Who My Local Police Are (Q6)*

| Q6: I know who my local police are. | | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
|  |  |  |  |  | Lower Bound | Upper Bound |
| Yes | No | .33* | 0.110 | 0.009 | 0.07 | 0.59 |
|  | Unsure | 0.32 | 0.173 | 0.154 | -0.09 | 0.73 |
| No | Yes | -.33* | 0.110 | 0.009 | -0.59 | -0.07 |
|  | Unsure | -0.01 | 0.191 | 0.999 | -0.46 | 0.44 |
| Unsure | Yes | -0.32 | 0.173 | 0.154 | -0.73 | 0.09 |
|  | No | 0.01 | 0.191 | 0.999 | -0.44 | 0.46 |

*Note.* Based on observed means.

*. The mean difference is significant at the .05 level.

**Appendix E**

**Quantitative Open-ended Data Coding**

**RQ2:** *What forms public awareness, trust, and expectations regarding police communication methods during urgent threat situations in Canada?*

Survey question: do you have any other comments or opinions about police use of emergency alerts you would like to share?

- 129 total comments received

- 63 total comments categorized using RQ2 as a guide

- 66 "other" comments identified

**Data Coding: Open-ended Data**

**Public Awareness:** 20 open-ended comments Also: public comprehension of public alerting

**Public Trust:** 23 open-ended comments

**Public Expectations:** 20 open-ended comments

**"Other":** 66 open-ended comments

*Defined as: "Other" comments I either cannot comprehend or are nil/unrelated statements.*

**Figure 6**: **Main themes, related definition and codes from quantitative interview coding.**